Author index

A

Abdel-Halim, S.M. 3, 722
Aboufriekha, M. 282
Acosta, D. 850
Adams, J.E. 615
Adlercreutz, H. 1275
Adrian, T.E. 183
Agardh, C.-D. 530
Akazawa, M. 696
Akazawa, S. 696
Akdeniz, A. 1037
Åkerblom, H.K. 364, 1303
Akkermans, L.M.A. 948
Alavi, M.Z. 316
Alberti, K.G.M.M. 52, 267, 978, 1079
Alcolado, J.C. 578
Alderman, M.H. 767
Alejandro, R. 759
Allen, T.J. 1037
Allo, S. 880
Altura, B.M. 767
Altura, B.T. 767
Åman, J. 931
Amann, J. 385
Amano, K. 391
Amiel, S.A. 460
Ammon, H.P.T. 920
Anai, M. 1139
Andersen, H.U. 574
Andersen, O. 870
Andersen, P. 438
Anderson, G.F. 615
Andersson, A. 39
Andreani, D. 797
Andreasen, A.H. 1007
Andreasen, H.B. 244
Andrews, J.W. 33
Anello, M. 1204
Annuzzi, G. 155
Aoki, Y. 79
Aoshima, H. 664
Arimura, T. 1105
Arnqvist, H.J. 961
Asano, T. 1139
Asplund-Carlson, A. 817
Assimacopoulos-Jeannet, F. 899
Åstedt, B. 117
Atkinson, A.B. 106
Atkinson, P. 369
Audrain, M. 778
Avanzini, M.A. 683

B

Bailbé, D. 589
Bailyes, E.M. 385
Baird, H.R. 998
Baldi, S. 1315
Banga, J.P. 385
Bangstad, H.-J. 523
Barbagallo, M. 146
Bardet, S. 778
Barker, D.J.P. 62, 225, 268, 471, 974
Barnett, A.H. 252
Barron, M. 73
Bartolomei, G. 1315
Baumgartner, R. 352
Beales, P.E. 487
Beatty, O. 106
Beck-Nielsen, H. 668, 752
Bell, G.I. 170, 335, 433, 1299
Bell, N.P. 106
Bell, P.M. 106
Benhamou, P.Y. 1109
Bennett, P.H. 428, 863, 998, 1087
Bent-Hansen, L. 361
Berends, M.J.H. 1258
Berg, K.J. 523
Berge-Henegouwen, G.P. van 948
Berger, M. 99, 175
Bergman, R.N. 121
Berne; Ch. 977
Berne, C. 843
Bersani, M. 653
Betsholtz, C. 183, 323
Beylot, M. 338
Bieg, S. 385
Bieniaszewski, L. 577
Bierman, E.L. 942
Binder, C. 560
Bingley, P.J. 675
Birg, F. 541
Blaxter, A.C. 207
Blum, D. 352
Bodansky, H.J. 1282
Bodkin, N.L. 200, 378
Boemi, M. 229
Bolli, G.B. 1191
Bonenkamp, J.W. 172
Bonfanti, R. 675
Bostedt-Kiesel, A. 1051
Bott, U. 99
Bottazzo, G.F. 547, 1208
Bouillon, R. 239
Boulton, A.J.M. 150, 454, 615
Bouwens, L. 352
Brandt, M. 785
Bravenboer, B. 948
Brazg, R.L. 942
Brendel, M. 759
Brennan, G.M. 33
Breschi, M.C. 1315
Brichard, S.M. 292
Brizzi, P. 88
Brown, D. 993
Brownlee, M. 802
Brownsey, R.W. 218
Brunetti, P. 1191
Brunk, U.T. 707
Bumbalo, L.M. 1238
Bürgi, W. 129
Buscema, M. 791, 1204
Butler, L. 912
Buzzetti, R. 1208
Bækkeskov, S. 510

C

Caldas, G. 675
Caltabiano, V. 791, 1204
Cam, M.C. 218
Cameron, N.E. 299, 516, 1132, 1230
Campbell, R.D. 727
Capeau, J. 1288
Capek, M. 84
Capel, P.J.A. 1258
Carlson, E.C. 936
Carlson, L.A. 817
Carneado, J. 850
Carpenter, A.-M. 1057
Carrington, A.L. 397
Cartwright, R.A. 1282
Casamitjana, R. 358
Cassell, P. 633
Catalano, C. 52
Cavan, D.A. 252
Cavanagh, P.R. 615
Celi, F.S. 797
Ceriello, A. 265, 1119
Chan, E. 1146
Chang, M.-S. 926
Charbonnel, B. 778
Charles, M.A. 428, 863, 998, 1087, 1146
Chatterjee, P.S. 972
Chauvet, D. 1185
Cheetham, T.D. 678
Chen, C. 1238
Cherian, P.V. 893
Chevenne, D. 1288
Chiang, B.N. 926
Chiarelli, F. 579
Chien, S. 926
Chiu, K. 141
Chiu, K.C. 409
Chosich, N. 716
Christiansen, E. 653
Christmanson, L. 183, 323
Ciccarese, M. 88
Ciofetta, M. 1191
Clark, A. 378, 1258
Clark, P.M.S. 62, 225
Clements, J.P. 234
Clodi, M. 84
Cochet, I. 1288
Colle, E. 682
Collins, A.C.G. 993
Conget, I. 358
Cook, D.L. 570
Cooke, A. 727
Cooper, M.E. 1037
Coppola, A. 547
Corbett, J.A. 470
Cordonnier, D.J. 1109
Cortie, C. 183
Cosmo, S. De 622
Cotroneo, P. 423
Cotter, M.A. 299, 516, 1132, 1230
Creutzfeldt, W. 741
Cripps, P.J. 207
Cristina, A. 797
Crowley, T.J. 93
Császár, A. 47, 882
Cunningham, J.M. 9

D

Dahl-Jørgensen, K. 523
Dahlquist, G. 560, 684, 1309
Damjancic, P. 346
Damsgaard, E.M. 1030
Darmaun, D. 1185, 1288
De Leeuw, I.H. 1155
De Prez, C. 352
De Rossi, M.G. 797
Deary, I.J. 771
Deckert, T. 244, 310, 361, 536
Decraene, T. 1155
Delaney, C.A. 9
Delarue, J. 338
Dessi, G. 547
Diem, P. 129
Dieplinger, H. 47, 882
Di Marino, L. 155
Di Mario, U. 797
Dinarello, C.A. 759
Dines, K.C. 516, 1132, 1230
Di Vincenzo, A. 1191
Djurhuus, M.S. 752
Dolben, J. 734
Dooms, L. 239
Dorchy, H. 352
Dosch, H.-M. 364
Dowse, G.K. 267
Drexel, H. 47
Dreyer, M. 1168
Dunger, D.B. 678
Dupre, J. 369
Dyerberg, J. 438
Dyrberg, T. 510
D'Alessio, D.A. 570
D'Errico, G. 423

E

Earle, K. 622
Edelbroek, M.A.L. 857
Edelstein, D. 802
Efendic, S. 3, 25, 722
Egawa, K. 414
Eiermann, T.H. 785
Eizirik, D.L. 39
Ekstrand, A. 642
Elbein, S.C. 141
Ellerman, K. 596
Ellis, E.A. 282
Elmansour, A. 778
Endl, J. 785
Engström, U. 183
Epifano, L. 1191
Eriksson, J. 472, 642
Eriksson, J.W. 113
Espinosa III, R. 335, 1299
Etoh, S. 475

Author index

A

Abdel-Halim, S.M. 3, 722
Aboufriekha, M. 282
Acosta, D. 850
Adams, J.E. 615
Adlercreutz, H. 1275
Adrian, T.E. 183
Agardh, C.-D. 530
Akazawa, M. 696
Akazawa, S. 696
Akdeniz, A. 1037
Åkerblom, H.K. 364, 1303
Akkermans, L.M.A. 948
Alavi, M.Z. 316
Alberti, K.G.M.M. 52, 267, 978, 1079
Alcolado, J.C. 578
Alderman, M.H. 767
Alejandro, R. 759
Allen, T.J. 1037
Allo, S. 880
Altura, B.M. 767
Altura, B.T. 767
Åman, J. 931
Amann, J. 385
Amano, K. 391
Amiel, S.A. 460
Ammon, H.P.T. 920
Anai, M. 1139
Andersen, H.U. 574
Andersen, O. 870
Andersen, P. 438
Anderson, G.F. 615
Andersson, A. 39
Andreani, D. 797
Andreasen, A.H. 1007
Andreasen, H.B. 244
Andrews, J.W. 33
Anello, M. 1204
Annuzzi, G. 155
Aoki, Y. 79
Aoshima, H. 664
Arimura, T. 1105
Arnqvist, H.J. 961
Asano, T. 1139
Asplund-Carlson, A. 817
Assimacopoulos-Jeannet, F. 899
Åstedt, B. 117
Atkinson, A.B. 106
Atkinson, P. 369
Audrain, M. 778
Avanzini, M.A. 683

B

Bailbé, D. 589
Bailyes, E.M. 385
Baird, H.R. 998
Baldi, S. 1315
Banga, J.P. 385
Bangstad, H.-J. 523
Barbagallo, M. 146
Bardet, S. 778
Barker, D.J.P. 62, 225, 268, 471, 974
Barnett, A.H. 252
Barron, M. 73
Bartolomei, G. 1315
Baumgartner, R. 352
Beales, P.E. 487
Beatty, O. 106
Beck-Nielsen, H. 668, 752
Bell, G.I. 170, 335, 433, 1299
Bell, N.P. 106
Bell, P.M. 106
Benhamou, P.Y. 1109
Bennett, P.H. 428, 863, 998, 1087
Bent-Hansen, L. 361
Berends, M.J.H. 1258
Berg, K.J. 523
Berge-Henegouwen, G.P. van 948
Berger, M. 99, 175
Bergman, R.N. 121
Berne; Ch. 977
Berne, C. 843
Bersani, M. 653
Betsholtz, C. 183, 323
Beylot, M. 338
Bieg, S. 385
Bieniaszewski, L. 577
Bierman, E.L. 942
Binder, C. 560
Bingley, P.J. 675
Birg, F. 541
Blaxter, A.C. 207
Blum, D. 352
Bodansky, H.J. 1282
Bodkin, N.L. 200, 378
Boemi, M. 229
Bolli, G.B. 1191
Bonenkamp, J.W. 172
Bonfanti, R. 675
Bostedt-Kiesel, A. 1051
Bott, U. 99
Bottazzo, G.F. 547, 1208
Bouillon, R. 239
Boulton, A.J.M. 150, 454, 615
Bouwens, L. 352
Brandt, M. 785
Bravenboer, B. 948
Brazg, R.L. 942
Brendel, M. 759
Brennan, G.M. 33
Breschi, M.C. 1315
Brichard, S.M. 292
Brizzi, P. 88
Brown, D. 993
Brownlee, M. 802
Brownsey, R.W. 218
Brunetti, P. 1191
Brunk, U.T. 707
Bumbalo, L.M. 1238
Bürgi, W. 129
Buscema, M. 791, 1204
Butler, L. 912
Buzzetti, R. 1208
Bækkeskov, S. 510

C

Caldas, G. 675
Caltabiano, V. 791, 1204
Cam, M.C. 218
Cameron, N.E. 299, 516, 1132, 1230
Campbell, R.D. 727
Capeau, J. 1288
Capek, M. 84
Capel, P.J.A. 1258
Carlson, E.C. 936
Carlson, L.A. 817
Carneado, J. 850
Carpenter, A.-M. 1057
Carrington, A.L. 397
Cartwright, R.A. 1282
Casamitjana, R. 358
Cassell, P. 633
Catalano, C. 52
Cavan, D.A. 252
Cavanagh, P.R. 615
Celi, F.S. 797
Ceriello, A. 265, 1119
Chan, E. 1146
Chang, M.-S. 926
Charbonnel, B. 778
Charles, M.A. 428, 863, 998, 1087, 1146
Chatterjee, P.S. 972
Chauvet, D. 1185
Cheetham, T.D. 678
Chen, C. 1238
Cherian, P.V. 893
Chevenne, D. 1288
Chiang, B.N. 926
Chiarelli, F. 579
Chien, S. 926
Chiu, K. 141
Chiu, K.C. 409
Chosich, N. 716
Christiansen, E. 653
Christmanson, L. 183, 323
Ciccarese, M. 88
Ciofetta, M. 1191
Clark, A. 378, 1258
Clark, P.M.S. 62, 225
Clements, J.P. 234
Clodi, M. 84
Cochet, I. 1288
Colle, E. 682
Collins, A.C.G. 993
Conget, I. 358
Cook, D.L. 570
Cooke, A. 727
Cooper, M.E. 1037
Coppola, A. 547
Corbett, J.A. 470
Cordonnier, D.J. 1109
Cortie, C. 183
Cosmo, S. De 622
Cotroneo, P. 423
Cotter, M.A. 299, 516, 1132, 1230
Creutzfeldt, W. 741
Cripps, P.J. 207
Cristina, A. 797
Crowley, T.J. 93
Császár, A. 47, 882
Cunningham, J.M. 9

D

Dahl-Jørgensen, K. 523
Dahlquist, G. 560, 684, 1309
Damjancic, P. 346
Damsgaard, E.M. 1030
Darmaun, D. 1185, 1288
De Leeuw, I.H. 1155
De Prez, C. 352
De Rossi, M.G. 797
Deary, I.J. 771
Deckert, T. 244, 310, 361, 536
Decraene, T. 1155
Delaney, C.A. 9
Delarue, J. 338
Dessi, G. 547
Diem, P. 129
Dieplinger, H. 47, 882
Di Marino, L. 155
Di Mario, U. 797
Dinarello, C.A. 759
Dines, K.C. 516, 1132, 1230
Di Vincenzo, A. 1191
Djurhuus, M.S. 752
Dolben, J. 734
Dooms, L. 239
Dorchy, H. 352
Dosch, H.-M. 364
Dowse, G.K. 267
Drexel, H. 47
Dreyer, M. 1168
Dunger, D.B. 678
Dupre, J. 369
Dyerberg, J. 438
Dyrberg, T. 510
D'Alessio, D.A. 570
D'Errico, G. 423

E

Earle, K. 622
Edelbroek, M.A.L. 857
Edelstein, D. 802
Efendic, S. 3, 25, 722
Egawa, K. 414
Eiermann, T.H. 785
Eizirik, D.L. 39
Ekstrand, A. 642
Elbein, S.C. 141
Ellerman, K. 596
Ellis, E.A. 282
Elmansour, A. 778
Endl, J. 785
Engström, U. 183
Epifano, L. 1191
Eriksson, J. 472, 642
Eriksson, J.W. 113
Espinosa III, R. 335, 1299
Etoh, S. 475

F

Fall, C.H.D. 62, 225
Fanelli, C. 1191
Fasching, P. 346, 973
Federlin, K. 1245
Felber, J.P. 1221
Feldt-Rasmussen, B. 57, 244, 361
Fernández-Alvarez, J. 358
Ferrannini, E. 1315, 1326
Ferrer, J. 358
Ferré, P. 503
Field, L.L. 1293
Finegold, D.N. 329
Finegood, D.T. 369
Finney, D. 907
Fitzgerald, C. 282
Fletcher, J.A. 252
Flyvbjerg, A. 1126
Fong, Y. 802
Forrester, J.V. 808
Forsblom, C. 642
Foussier, V. 1288
Fowler, B. 352
Frahm Bjørn, S. 523
Freeman, D. 369
French, L.R. 234
Frier, B.M. 771
Frittitta, L. 1163
Froesch, E.R. 465
Frøland, A. 1030
Fujimoto, W.Y. 570
Fujishima, M. 1198
Fumelli, P. 229
Furmanski, J. 577
Fürnsinn, C. 602
Furuta, S. 79

G

Gaalen, S. van 1258
Gale, E.A.M. 487, 675
Gall, M.-A. 438, 1064, 1071
Gamble, J. 648
Ganrot, P.O. 876
García-Donas, M.A. 850
Garrel, D.R. 829
Gartside, I.B. 648
Gerber, P. 229
Gerbitz, K.-D. 578
Ghirlanda, G. 423
Gilbert, R. 1037
Girard, J. 292, 503
Giroix, M.-H. 305
Gironi, A. 1315
Giugliano, D. 265
Glatz, Y. 465
Godbole, M.M. 826
Goetz, F.C. 234, 1057
Goguen, J.M. 813
Gomis, R. 358
Gonzales, C. 1002
Gorus, F.K. 1155
Goto, Y. 3
Gouhot, B. 503
Granger, G. 1146
Grant, M.B. 282
Grasso, G. 1163
Greco, A.V. 423
Green, A. 547
Green, I.C. 9
Greene, D.A. 608
Griesmacher, A. 1045
Groop, L. 642
Groop, L.C. 1299, 1326
Groop, P.-H. 642
Gruffydd-Jones, T.J. 207
Grüßer, M. 99
Guberski, D.L. 912
Guenifi, A. 3
Guettet, C. 589
Guillaume-Gentil, C. 899
Guiserix, J. 1109
Gupta, R.K. 146, 767
Gupta, S.K. 826, 972
Gutiérrez, C. 881
Guy, J. 282

H

Haanen, C. 472
Habu, S. 1252
Hackeng, W.H.L. 1258
Haesler, E. 1221
Haffner, S.M. 1002
Halban, P.A. 1322
Hales, C.N. 62, 225, 268, 471, 974
Halimi, S. 1109
Hallberg, A. 39
Halmos, T. 47
Halperin, M.L. 813
Hamsten, A. 817
Handberg, A. 481, 668
Haneda, M. 276, 1105
Hansen, B.C. 200, 378
Hansen, H.P. 481
Hanson, R.L. 428, 1087
Hanssen, K.F. 523
Häring, H.U. 176, 628
Harling, H. 653
Harris, N. 1266
Harrison, L.C. 716
Harry, D.S. 121
Hartling, S.G. 560
Hartmann, A. 523
Hartter, E. 84
Haruta, T. 414
Hashimoto, N. 433
Hasslacher, C. 1051
Hasuo, Y. 1198
Hatamori, N. 391
Hattori, M. 727
Hautanen, A. 1275
Hawrami, K. 633
Hayes, J.R. 33
Hazuda, H.P. 1002
Heimann, P. 352
Hejnæs, K.R. 510
Hellerström, C. 1, 175, 1219
Helqvist, S. 759
Henquin, J.C. 292
Henriksen, J.E. 752
Henry, W.R. 33
Hepburn, D.A. 771
Herberg, L. 385
Hermitte, L. 541
Herwig, J. 172
Hillebrand, B. 402
Hiltunen, M. 1303
Hirao, Y. 391
Hirt, A. 129
Hitchins, M. 633
Hitman, G.A. 633
Ho, L.T. 493
Hobolth, N. 870
Hoffman, M. 141
Hofhuis, F.M.A. 1258
Høier-Madsen, M. 510
Holly, J. 678
Holst, J.J. 653, 741
Holzmann, P. 465
Hommel, E. 438
Hong, C.-Y. 926
Höppener, J.W.M. 1258
Horiuchi, K. 664
Horoszek-Maziarz, S. 577
Horowitz, M. 857
Hosszufalusi, N. 1146
Hother-Nielsen, O. 752
Houde Nadeau, M. 829
Høyer, P.E. 481
Hramiak, I.M. 369
Hulst, K.L. van 1258
Hummel, M. 402
Hvidberg, A. 653
Hyöty, H. 1303
Hyvönen, K. 68

I

Ilonen, J. 364
Imamura, H. 475
Imamura, T. 414
Inadera, H. 91
Inoue, T. 664
Inukai, K. 1139
Irminger, J.-C. 1322
Iselius, L. 25
Ishibashi, O. 414
Ishihara, H. 1139
Ishikawa, Y. 91
Issad, T. 503
Itazu, T. 414
Ito, S. 91
Iwamoto, H. 1198
Iwanishi, M. 414

J

Jaakkola, S. 133
Jaap, A.J. 648
Jackson, M.R. 955
Jacobs, K.H. 252
Jakubowski, J.J. 1266
James, R.W. 229
Jansz, H.S. 1258
Jeanrenaud, B. 899
Jebbink, H.J.A. 948
Jenkins, D. 252, 1210
Jensen, T. 57
Jéquier, E. 1221
Jerums, G. 1037
Johnson, K.H. 183
Johnston, G.D. 33
Jones, J. 678
Jørgensen, O.D. 1030
Jörgens, V. 99
Juhász, E. 47
Jungfer, H. 785

K

Kahler, K. 907
Kahn, S.E. 570
Kajiwara, N. 276
Kalsbeek-Batenburg, E.M. 472
Kamijo, M. 608, 893
Kämpe, O. 39
Kanatsuka, A. 433
Kaprio, J. 472
Karádi, I. 47
Karlsson, F.A. 39
Karmiris, V. 9
Karvonen, M. 883
Kasatani, T. 1252
Kasuga, A. 1252
Kasuga, M. 391
Katagiri, H. 1139
Kato, I. 1198
Kautzky-Willer, A. 84
Kawana, K. 664
Kawasaki, E. 696
Kayser, L. 481
Keiding, N. 1007
Keller, S.R. 335
Keller, U. 966
Kellerer, M. 628
Kelly, M.A. 252
Kelly, S.T. 907
Kempe, H.P. 1051
Kendall, E. 727
Kerr, D. 73
Kesäniemi, Y.A. 472
Khan, A. 3
Kikkawa, R. 276, 1105
Kikuchi, M. 1139
Kiyohara, Y. 1198
Kiyosawa, K. 79
Klausen, I.C. 1079
Klebe, J.G. 955
Kleijer, W.J. 172
Klein, J.C. 658
Klein, R. 428
Klein, R.L. 258
Kleine, N. 741
Klöppel, G. 352
Knigge, U. 653
Knip, M. 364
Knöbl, P. 1045
Knott, R.M. 808
Knowler, W.C. 428, 863, 998, 1087
Knudsen, D. 752
Kobayashi, M. 414
Kobayashi, T. 92
Koch, M. 1113
Kofod, H. 653
Kofoed-Enevoldsen, A. 244, 310, 536
Kohner, E.M. 88
Kolb, H. 17
Kolb-Bachofen, V. 17
Koning, E.J.P. de 378, 1258
Kosaka, K. 92
Koskenvuo, M. 472
Koya, D. 276

Kriska, A.M. 863
Kröncke, K.-D. 17
Krone, W. 1168
Krug, J. 487
Krupa-Wojciechowska, B. 577
Kruszynska, Y.T. 121
Ktorza, A. 589
Kuipers, A. 172
Kullberg, C.E. 961
Kuller, L.H. 863
Kumps, A. 352
Kushida, K. 664
Kuusisto, J. 553
Kverneland, A. 361

L

Laager, R. 966
Laakso, M. 553
Lamisse, F. 338
Landin-Olsson, M. 684
LaPorte, R. 883
LaPorte, R.E. 863
Laragh, J.H. 767
Larsson, G. 117
Larsson, J. 323
Lattimer, S.A. 608
Laury, M.C. 589
Leahy, J.L. 1238
Leatherdale, B.A. 73
Le Beau, M.M. 335, 1299
Leblanc, H. 1185
Leckström, A. 183
LeCompte, P.M. 1057
Ledet, T. 445
Ledoux, F. 1109
Lehtinen, J.M. 68
Lehto, M. 1299
Leinikki, P. 1303
Lemonnier, F. 658
Lenz, A. 402
Lepore, M. 1191
Li, M. 497
Libman, I. 883
Liener, K. 602
Lienhard, G.E. 335
Like, A. 596
Like, A.A. 912
Lilley, H.E.B. 1282
Lin, S.-J. 926
Lindgren, F.A. 560
Linn, T. 1245
Lips, C.J.M. 1258
Liu, Q.Z. 428, 998, 1087
Loche, M. 547
Lockett, M.J. 397
Loewk, E. 1245
Lönnroth, P. 113
Lopes-Virella, M.F. 258
Lorini, R. 683
Lounamaa, R. 1303
Ludvik, B. 84
Luft, R. 25
Lund, T. 727
Luthman, H. 25
Luu, T. 907

M

Maassen, J.A. 172, 1168
MacDonald, F.A. 993
Macdonald, I.A. 460
Mackay, I.R. 685
Macleod, A.F. 150
MacLeod, K.M. 771
Madsbad, S. 653
Maeda, S. 391
Maeda, Y. 696
Magnani, P. 423
Magre, J. 1288
Mahon, J.L. 369
Maioli, M. 88
Makino, H. 433
Makino, S. 727
Malaisse, W.J. 305, 722
Malaisse-Lagae, F. 722
Malik, R.A. 454
Mames, R.N. 282
Mancini, M. 155
Mandeli, J. 745
Mandrup-Poulsen, T. 470, 759
Manto, A. 423
Manzi, S.M. 912
Maran, A. 460
Maraninchi, D. 541
Mardens, Y. 352
Marks, J.L. 497
Marra, G. 423
Marshall, M.O. 510
Martin, J.M. 364
Maruyama, T. 1252
Massa, G. 239
Matschinsky, F.M. 1216
Matsumoto, K. 696
Mattei-Zevaco, C. 541
Matthews, D.R. 678
Maury, J. 503
Maxfield, E.K. 299, 516, 1230
Mayhew, T.M. 955
Mayrhofer, M. 402
McArthur, R.G. 1293
McCance, D.R. 1087
McCarthy, M.I. 633
McDaniel, M.L. 470
McDermott, B.J. 33
McGrath, L.T. 33
McGregor, A.M. 385
McIntyre, N. 121
McIntyre, S.F. 907
McNally, R.J.Q. 1282
McNeill, J.H. 218
McVeigh, G.E. 33
Medina, R. 1094
Mehnert, H. 176
Mercier, P. 541
Meuris, S. 722
Mijovic, C. 252
Mijovic, C.H. 1210
Mikhailidis, P. 880
Mitchell, B.D. 1002
Mithal, A. 826
Miyazaki, J. 1252
Miyazaki, J.-I. 1139
Moatti-Sirat, D. 658
Modarelli, F. 1191
Mody, C. 1266
Mogensen, C.E. 977, 1007, 1030, 1079
Mohan, V. 633
Mollenhauer, U. 402
Møller, N. 1079
Monnier, V.M. 936
Monterrosa, A. 1002
Moore, S. 316
Mørch, L. 759
Morgan, R. 409
Morgese, G. 579
Morimoto, I. 475
Morocutti, A. 622
Morris, J.F. 1258
Morton, N. 633
Mosthaf, L. 628
Mouraux, T. 352
Mozaffari, M. 880
Mühlhauser, I. 99
Muir, P. 207
Mukherjee, J. 972
Müller, M. 1045
Müller-Wieland, D. 1168
Mullis, P. 129
Munguira, M.E. 1163
Muntoni, Sa. 547
Muntoni, Se. 547
Muona, P. 133
Murase, T. 92
Mykkänen, L. 553, 1002

N

Nagataki, S. 475, 696
Naitou, K. 414
Nakaki, T. 1252
Nakanishi, K. 92
Nakayama, K. 1198
Namba, H. 475
Narkiewicz, K. 577
Nauck, M.A. 741
Neely, R.D.G. 106
Nelson, R.G. 863, 998, 1087
Nerup, J. 470, 759, 870
Nielsen, F.S. 438, 1064, 1071
Nielsen, S. 1079
Nilsson-Ehle, P. 117
Nishio, T. 1105
Niskanen, L. 68
Niskanen, L.K. 1175
Nomiyama, K. 1198
Noonan, D. 310
Nørgaard, K. 57, 244, 870
Normand, S. 338
Novials, A. 358
Nowotny, P. 346, 602
Nyberg, G. 523, 1064
Nyengaard, J.R. 189, 1126
N'Guyen, J.M. 589

O

Öberg, K. 843
Obermaier-Kusser, B. 628
Oguchi, H. 79
Ohishi, T. 664
Ohmori, S. 1198
Ohmura, T. 1198
Ohtsuru, A. 475
Oka, Y. 1139
Okuno, S. 696
Olivarius, N. de F. 1007
Oosterwijk, C. 1258
Orchard, T.J. 329
Ørskov, C. 741
Ortmeyer, H.K. 200
Osmond, C. 62, 225
Östenson, C.-G. 3, 722
Østerby, R. 523, 1064
Owens, D.R. 409, 734

P

Pachiaudi, C. 338
Pacifico, A. 88
Pacini, G. 84
Packer, L. 1212
Paepe, M.E. De 682
Pampanelli, S. 1191
Papaccio, G. 682
Papadopoulos, G.K. 1215
Papasouliotis, K. 207
Parving, H.-H. 438, 1064, 1071
Pastor, R. 881
Patsch, J.R. 47
Patti, L. 155
Paul, T.L. 369
Peakman, M. 564
Pederson, R.A. 218
Peltonen, J. 133
Penny, M.A. 252, 1210
Perdereau, D. 503
Permerth, J. 323
Permutt, M.A. 141, 409
Perrett, D. 797
Persson, B.E. 560
Petersen, J.S. 510, 536
Peters, J.R. 734
Pettitt, D.J. 428, 863, 998, 1087
Phillips, D.I.W. 471
Phipps, K. 62, 225
Pickard, J. 73
Pietschmann, P. 1045
Pipeleers, D.G. 1155
Pociot, F. 574, 759, 870
Poitout, V. 658
Polak, J.M. 323
Pomerleau, J. 829
Pometta, D. 229
Pongratz, D.E. 628
Porcelli, G. 423
Pørksen, N. 1079
Porta, M. 88
Portha, B. 305, 589
Portwood, N.D. 687
Posner, B.I. 113
Powrie, J.K. 460
Pozzilli, P. 487, 1208
Prager, R. 84, 1045
Procaccini, E. 487
Province, M.A. 409
Prskavec, M. 602
Pugh, J.A. 1094
Pujol-Borrell, R. 358
Purewal, T. 564
Purrello, F. 791, 1204
Pyörälä, K. 553, 1175
Pénicaud, L. 589

Q

Quatraro, A. 265

R

Rabinovitch, A. 596
Rabl, W. 402
Rabuazzo, A.M. 791, 1204
Raine, A.E.G. 1099
Rakotoambinina, B. 1288
Ramachandran, A. 633
Ramirez, L.C. 972
Ramirez, M. 1094
Randle, P.J. 269, 1217
Rasch, R. 189, 1126
Raskin, P. 972
Rasmussen, L.M. 445
Rasschaert, J. 722
Ratheiser, K. 346
Rayfield, E.J. 745
Reach, G. 658
Rees, A. 409
Reimers, J.I. 574, 759
Remuzzi, G. 622
Rendell, M.S. 907
Rennie, I.G. 1266
Resnick, L.M. 146, 767
Reunanen, A. 472, 1303
Riccardi, G. 155
Rich, S.S. 234
Richart, C. 881
Richter, W. 785
Riesen, W.F. 465
Riou, JP. 338
Ritz, E. 977, 1113
Rivellese, A.A. 155
Robertson, M. 808
Robert, J.-J. 1185
Robert, J.J. 1288
Robinson, B.H. 364, 1216
Roden, M. 602
Röder, M.E. 560
Rodriguez, M.-L. 17
Romagnoli, F. 229
Romano, G. 155
Romanov, K. 472
Romics, L. 47
Rønningen, K.S. 371
Rooney, D.P. 106
Rosati, C. 797
Rosipal, S.R. 1168
Rossing, P. 438
Ross, S. 1293
Rowley, M.J. 685
Rudberg, S. 1309
Rüdiger, H.W. 1168
Ruggenenti, P. 622
Ruiz-Gutierrez, V. 850
Ryan, C.M. 329
Ryding, E. 530
Rynkiewicz, A. 577

S

Saito, Y. 91
Saï, P. 778
Salonen, V. 133
San Marco, M.P. 541
Sandholzer, C. 47
Sandler, S. 843
Sarri, Y. 358
Saruta, T. 1252
Sasaoka, T. 414
Savilahti, E. 364, 684
Sawada, K. 1105
Schaffer, S.W. 195, 880
Schaftingen, E. Van 581
Scherbaum, W.A. 385, 785
Schernthaner, G. 1045
Schersten, B. 117
Schiavi, R.C. 745
Schmitz, A. 985, 1064
Schmitz, O. 1079
Schnack, C. 1045
Schneider, B. 346
Schneider, K. 1245
Schuit, F.C. 1155
Schuler, J.J. 129
Seemanova, E. 1168
Seffer, E. 628
Seghieri, G. 1315
Seino, S. 433
Seißler, J. 785
Sell, D.R. 936
Semetkowska, E. 577
Sener, A. 305, 722
Sensi, M. 797
Serjeantson, S.W. 685
Sesti, G. 628
Sethi, M. 993
Shaikh, S. 727
Sharma, A.K. 454
Sheridan, B. 106
Shigeta, Y. 276, 1105
Shimada, A. 1252
Shimada, F. 433
Shinkawu, A. 1198
Shinomiya, M. 91
Shirai, K. 91
Shirotori, K. 79
Shore, A.C. 648
Sievers, M.L. 1087
Signore, A. 487
Siitonen, O. 68, 1175
Sima, A.A.F. 608, 893
Simmons, D.A. 212
Sinha, A. 1037
Smidt, U.M. 1071
Smith, U. 113
Smout, A.J.P.M. 948
Snehalatha, C. 633
Snellman, K. 560
Somoza, N. 358
Songini, M. 547
Sonksen, P.H. 150
Sørensen, F.B. 955
Southern, C. 9
Spiro, M.J. 93
Spjuth, J. 117
Spooren, P.F.M.J. 472
Sprafka, J.M. 234
Stabilini, M. 547
Staines, A. 1282
Standl, E. 402, 1017
Stanley, J.C. 73
Steffan, I. 602
Stehouwer, C.D.A. 473
Sten-Linder, M. 25
Stengård, J. 472
Stenninger, E. 931
Stephenson, C. 1282
Stern, M.P. 1002
Stevens, E.J. 397
Stevens, M.J. 608
Stewart, L.L. 1293
Stiefel, P. 850
Stiegler, H. 1017
Stimmel, B.B. 745
Stoffel, M. 170, 335, 1299
Stoppa, A.M. 541
Straathof, J.W. 857
Straub, S.G. 920
Streicher, R. 1168
Stridsberg, M. 843
Strojek, K. 580
Stubbs, M. 912
Sum, C.F. 52
Suzuki, K. 3
Szopa, T.M. 687

T

Taira, M. 433
Takahashi, M. 664
Takao, Y. 696
Takata, Y. 414
Takei, I. 1252
Takei, S. 1146
Taki, T. 391
Takino, H. 696
Tallroth, G. 530
Tanizawa, Y. 141, 409
Taskinen, M-R. 161
Taylor, A.M. 678
Taylor, K.W. 687
Teppo, A.-M. 642
Terando, J.V. 907
Terenghi, G. 323
Teruya, M. 1146
Tesfaye, S. 454, 1266
Teuscher, A. 129
Thibault, C. 589
Thivolet, C. 541
Thomas, B. 1113
Thomas, R. 73
Thomas, T.H. 52
Thompson, S.D. 454
Thorsby, E. 371
Thye-Rønn, P. 752
Tilli, P. 423
Titchener, P.A. 687
Togawa, M. 276
Tominaga, Y. 391
Tomlinson, D.R. 397
Tonolo, G. 88
Tooke, J.E. 648
Tormo, M.A. 589
Tosi, R. 1208
Trimble, E.R. 106
Trischitta, V. 1163
Trivedi, N. 826
Trocino, R.A. 696
Tsalamandris, C. 1037
Tschöpe, W. 1113
Tsukuda, K. 1139
Tuomi, T. 685
Tuomilehto, J. 472, 883, 1303

U

Ueda, K. 1198
Ullman, E. 1309
Umpleby, A.M. 460
Uotani, S. 696
Usa, T. 475
Utermann, G. 47, 882
Uusitupa, M. 68
Uusitupa, M.I.J. 1175

V

Vaag, A. 668, 752
Vague, P. 541
Valdez, R.A. 1002
Vamos, E. 352
Vanderschueren-Lodeweyckx, M. 239
Vandewalle, C.L. 1155
Van Gompel, J. 352
Van Huysen, C. 608
Van Maldergem, L. 172
Velloso, L.A. 39
Vendrell, T. 881
Verbeek, J.S. 1258
Verchere, C.B. 570
Verdy, M. 829
Vergani, D. 564
Verini, M. 579
Vermes, I. 472
Verrotti, A. 579
Vesikari, T. 1303
Veves, A. 454
Vialettes, B. 541
Viberti, G.C. 622, 977, 993
Vidal, P. 244
Vierhapper, H. 346, 602
Vigneri, R. 791, 1163, 1204
Villar, J. 850
Vinci, C. 791, 1204
Vinten, J. 481, 668
Visser-Vernooy, H.J. 1258
Viswanathan, M. 633
Vitali, L. 683
Voldsgaard, A.I. 438
Voldstedlund, M. 481
Vollenweider, F. 1322
Vora, J.P. 734
Vordemann, J. 402
Vorm, E.R. van der 172, 1168
Voutilainen, E. 1175
Vuorinen-Markkola, H. 161

W

Wahl, M.A. 920
Wahl, P. 1051
Waite, K. 497
Waldhäusl, W. 346, 602, 973
Walker, J. 622
Walker, M. 52
Wang, E.A. 802
Ward, J.D. 454, 1266
Wasty, F. 316
Watanabe, K. 1252
Watkins, P.J. 564
Wedell, A. 25
Westermark, G.T. 323

Westermark, P. 183, 323
Widén, E. 642, 1326
Wilander, E. 843
Wilkinson, R. 52
Williams, A. J. K. 487
Williams, D. R. R. 150
Williams, J. D. 734
Williams, T. M. 329
Williamson, J. R. 1057
Willms, B. 741
Wilson, G. 880
Wilson, G. L. 195
Wilson, G. S. 658
Wilson, R. M. 1266
Wiman, B. 817
Winegrad, A. I. 212
Winocour, P. H. 52
Wishart, J. M. 857
Wolfahrt, S. 785
Wrobleski, M. 596

X

Xiang, K. 1299
Xu, S. 487

Y

Yagisawa, M. 1105
Yamashita, S. 475
Yanagisawa, Y. 79
Yassin, N. 385
Yazaki, K. 79
Yazaki, Y. 1139
Yki-Järvinen, H. 161
Yokono, K. 391
Yokota, A. 475, 696
Yoshida, S. 91, 433
Yoshitake, T. 1198
Young, M. J. 150, 615

Z

Zanone, M. M. 564
Zenobi, P. D. 465
Zhang, H. 707
Zhang, Y. 658
Ziegler, A.-G. 402
Zimmet, P. Z. 267, 685
Zmirou, D. 1109
Zochodne, D. W. 493
Zumsteg, U. 759
Zuppinger, K. A. 129

Subject Index

KEY: A = Abstract in Supplement 1; b = Book review; c = Correspondence; r = Review or Debate; w = Workshop report

A

α-glucosidase inhibitor – acarbose – treatment in rat 503
A-cell – glucose sensitivity – Type 2 diabetes A 118
– insulin receptor – expression A 6
Acarbose *[see* α-glucosidase*]*
Acetylcholine vasodilatation – fish oil, effect of – diabetes 33
Acidaemia – insulin treatment, acute exacerbation by 813
Acipimox – hypoglycaemia, effect in 1191
Adipocyte – lipogenesis – acarbose treatment, effect of 503
– – hyperinsulinaemia, effect of 503
– vanadate, effect on 113
Adipose tissue – glycogen synthase – diabetic rhesus monkey 200
– protein metabolism – in vivo A 144
– subcutaneous – glycerol & lactate production A 147
Adrenal medullary chromaffin cell – IGF-I, effect of A 126
Ageing – bone matrix, effect on 802
– skin – Type 2 diabetes 936
Albumin – transcapillary escape rate *[see* Capillary – permeability*]*
– excretion rate *[see also* Microalbuminuria*]*
– – diabetes – Type 2 1037
– – – Type 2 – 3-year study 1021
– – glycosaminoglycan N-deacetylase activity 310
– – haemostasis and – diabetes 1045
– – progression – apo(a) 1037
– – – blood pressure 1037
– – variability – Type 1 diabetes A 216
– glycated – plasma escape rate 361
Albuminuria – diabetes – Na^+/Li^+ countertransport 52
– – Type 2 – prediabetic blood pressure 998
Alcohol – Type 1 diabetes – hypoglycaemia not caused A 151
Aldose reductase – inhibitor – glomerular function, effect on A 221
– – glomerular hyperfiltration, effect on A 57
– – microalbuminuria, effect in A 57
– – Na^+/K^+ ATPase, effect on A 57
– – optic neuropathy, prevention of – BB rat 893
– – nerve metabolism effect on A 199
– retina – glucose *vs* galactose, effects of 808
Alloxan – cytotoxicity – iron, role of 707
Amino acid – infusion – metabolic effect – lipid, effect of A 145
Aminoguanidine – aldose reductase, effect on? A 200
– retinopathy, experimental diabetic, effect on A 50
AMP – cyclic – islet – interleukin 1β, effect of 9
Amylin – amyloid, relation to – human islet 323
– – *Lagomorphae* 183
– assay A 137
– glucose metabolism, effect on – transgenic mouse 1258
– immunoreactivity *vs* mRNA – human islet 323
– insulin secretion, effect on – GIP-stimulated A 136
– – rat pancreas A 135
– insulin sensitivity and – man A 135
– insulin, relationship to in insulin resistant rats A 88
– kinetics following glucose load A 136
– lactate response to glucose load, effect on A 136
– malignant pancreatic endocrine tumour, production by 843
– overexpression – transgenic mouse A 29
– processing – macrophage, role of A 29
– proIAPP – localisation in islets and insulinoma A 136
– release – insulin secretion, independent of 570
– serum – dexamethasone, effect of – Type 2 diabetes 84
Amyloid – islet – diabetic rhesus monkey 378
Angiotensin – II – neuropathy, in – streptozotocin-diabetic rat 1230
– – receptor blocking agent – ZD 8731 1230
– converting enzyme – gene – diabetic nephropathy A 27
– – hypertension in diabetes A 72
– – inhibitor – diabetic nephropathy A 63
– – – microalbuminuria, effect on A 221
– – urinary kallikrein and – Type 2 diabetes A 218
Animal model – diabetes – Type 1 A 9
Anti-oxidant – treatment – diabetes 1212 w
Antibody – β-lactoglobulin – Type 1 diabetes 683 c
– GAD – 64kD isoform-specific – immunoprecipitation A 93
– – 65kD isoform-specific – radioimmunoassay A 92
– – assay – antigen conformation & aggregation, effect of A 92
– – – blocking factor in serum A 92
– – diabetes – non-insulin-treated – predicting insulin need A 98
– – disease specificity A 24
– – isoforms – Type 1 diabetes A 36
– – monoclonal 778, A 92, A 92
– – radioimmunoassay A 45
– – Type 1 diabetes – neuropathy and 685 c
– heat-shock protein – Type 1 diabetes A 25
– insulin auto *[see also* Insulin – autoimmune syndrome*]*
– – children of diabetic mothers, appearance in 402
– – Type 1 diabetes – age & HLA-DQ haplotype 1155
(Antibody) – islet-cell – assay – ELISA A 100
– – children of diabetic mothers, appearance in 402
– – GAD *[see also* Antibody – GAD*]*
– – – reconstituted SCID mouse 510
– – – species specificity – Type 1 diabetes 39
– – – Type 1 diabetes A 25
– – ganglioside – GN2-1 – prediabetes Type 1 A 24
– – gestational diabetes A 168
– – heterogeneity – prediabetes Type 1 92 c
– – HLA associations – whole-islet *vs* GAD antibody A 97
– – – HLA-DQ not associated in normal children A 88
– – maternal diabetes, following A 58
– – monoclonal – specificity 778
– – persistence in Type 1 diabetes A 99
– – species cross-reactivity 778
– – transplacental passage 402
– – Type 1 diabetes – age & HLA-DQ haplotype 1155
– monoclonal – GAD 778
– – islet-cell 778
– – T-cell receptor Vβ 391
– mumps – Type 1 diabetes 1303
– nervous tissue – diabetic autonomic neuropathy 564
– sulphatide – Type 1 diabetes A 24
Antigen – islet-cell – 37/40kD – Type 1 diabetes A 25
– – GAD – B-cell surface expression absent A 93
– – – expression – glucose, effect of A 10
– – – extracellular after islet damage A 25
– – – insulin secretion, effect of A 24
– – – NOD mouse A 10
– – – species specificity A 9
– – T-cell activation by – NOD mouse 385
Apo, Apolipoprotein *[see* Lipid, Lipoprotein – apo*]*
Arginine – NG monomethyl-L- – vasodilator response, effect on 33
Ascorbic acid – urinary excretion – Type 1 diabetes A 219
Aspirin *[see* Salicylate*]*
Atherogenesis – endothelial permeability – diabetic rat 926
– glycosaminoglycans in – human aorta 316
– insulin excess, role of 942
Atherosclerosis *[see also* Vascular – disease*]*
– diabetes – collagen, changes in 445
Author index – Abstracts A 223

Autoimmunity – polyendocrine – transfer by bone marrow transplantation 541

B

B-cell, pancreatic [*see also* Insulin-secretion; Islet]
– – ageing, effect of – *db/db* mouse A81
– Ca^{2+} – oscillations – slow A60
– congenital absence 352
– cytokine toxicity A95
– – free radicals involved 470c
– – interleukin-1 receptor antagonist study 759
– – NOD mouse 1252
– – metabolic activity and A76
– electrical activity – burst A60
– fetal – development – glucose sensitivity A105
– – protein tyrosine kinase A66
– function – diabetes – Type 1 A54
– – Type 1 diabetes – onset 358
– GAD – fuels, effect of A115
– glucoreceptor – history 1215c
– glucose sensitivity – glucose potentiation 1238
– – heterogeneity A32
– ionic channel – glucose-stimulated events A59
– lysis – macrophage, role of – NOD mouse 1252
– – nitric oxide A61
– – – NOD mouse 1252
– – oxygen radicals A61
– nitric oxide – synthase A76
– p_2-purinoceptor A120
– pH – alkalisation – insulin release, enhancement of A106
– – glucose – induced alkalinisation – mechanism A112
– – microspectrofluorimetry in intact islets A101
– phosphoinositide – hyperglycaemia potentiation A103
– protein kinase – C A113
– sulphonylurea receptor /*see* Sulphonylurea/
– volume regulation – D-glucose, effect of A101
Birth order /*see* Epidemiology/
Birth weight – high – maternal risk factor 117
– – proinsulin, cord blood, association with A64
– low – insulin resistance, subsequent A85
– – maternal insulin resistance A56
– – Type 2 diabetes, subsequent 225, 973c
– – – Pima Indians A4
– maternal glucose & insulin, effects of in normal pregnancy 1315
Blood flow /*see also* Vasomotor function/
– cerebral – hypoglycaemia, in 73, 530
– endoneurial 493
– hyperglycaemia, increased by – nitric oxide, role of A51
– skeletal muscle – resting – insulin resistance and 876
– skin – laser doppler 907
– – streptozotocin-diabetic rat 907
Blood pressure /*see also* Hypertension/
– ambulatory monitoring – microalbuminuria A214
– – Type 1 diabetes 577c
– hyperinsulinaemia – proinsulin/fragments confounding A71
– – prospective study A72
– insulin resistance and A71
– – ambulatory monitoring A130
– nocturnal – autonomic neuropathy A26
– von Willebrand factor and 472c
Body – fat distribution /*see* Fat – distribution/
Bone – diet, effect of – diabetes – childhood A58
– differentiation – advanced glycation end-products, effect of 802
– matrix – advanced glycation end-products, effect of – rat 802
– maturation – childhood diabetes A59
Bovine – serum albumin – immunoreactivity – Type 2 diabetes, role in? 364
Breast feeding /*see* Cow's milk/
Browning /*see* Glycation/

C

C-peptide – action – insulin pharmacokinetics, effect on A126
– degradation – insulin-secreting cell A108
– metabolic effect – exercise, in A22
– secretion – galanin, effect of 653
Calcitriol ($1,25(OH)_2$ cholecalciferol) /*see also* Mouse; Insulin – resistance – uraemia/
– insulin receptor expression, effect on A122
Calcium – metabolism – diabetes – glycaemic control, effect of A165
Capillary permeability – coagulation and A71
– glycated albumin 361
– skin – diabetic nephropathy, in A220
– Type 1 diabetes 648
– – with hypertension 57
– islet – diabetic BB rat 682c
Capsaicin – neurogenic inflammation model 493
Cardiovascular risk factor /*see also* Lipid; Lipoprotein; Hypertension; Smoking/
– albuminuria and – Type 1 diabetes A205
– apo – (a) 88
– – – diabetic nephropathy 438
– – E – women 229
– big baby 117
– diabetes – Type 1 – twins A15
– – Type 2 A205
– insulin resistance A78
– – waist-hip ratio comparison A77
– lipoprotein (a) – diabetic nephropathy A205
– lipoprotein composition – Type 2 diabetes 1175
– lipoproteins – albuminuria & diabetes A206
– medial arterial calcification A207
– microalbuminuria 1030
– – Type 2 diabetes 1175
– Type 2 diabetes, predicting 553
Care of diabetes /*see* Diabetes – care/
Carnitine – palmityl transferase – inhibitor – etomoxir /*see* Hypoglycaemic agent/
Carotid artery /*see* Vascular – disease/
Cataract – congenital – maternal diabetes – rat A42
Catecholamine – hypoglycaemia, in 460
– – IGF-I, effect of 966
CCK (Cholecystokinin)
– 8 – insulinotropic effect – amino acids, effect of A48
Cell – membrane – composition – Type 1 diabetes 850
Cheiroarthropathy 79, A195
Childhood /*see also* Growth; Infancy; Neonate; Puberty; Diabetes – Type 1/
– islet autoimmunity – maternal diabetes A58
Cholecystokinin /*see* CCK/
Chromogranin A processing A102
Cirrhosis – glucose intolerance 121
Clamp – euglycaemic hyperinsulinaemic – insulin resistance 346
– glucose processing *vs* IVGTT A143
– – lipoatrophic insulin resistance 1288
– hyperglycaemic – galanin, effect of 653
– – rat 589
Coagulation /*see* Haemostasis/
Cognitive function /*see also* Hypoglycaemia/
– diabetes – Type 1 329
– diabetic neuropathy and A185
– hypoglycaemia, effect of – recurrent 329
Collagen /*see also* Procollagen/
– arterial – diabetes, changes in 445
– myocardium – diabetic rat 93
– Type IV – diabetes 445
– Type V – diabetes 445
Complications of diabetes – nephropathy /*see* Nephropathy – diabetic/
– pulmonary function abnormalities 580c, 972c
– neuropathy /*see* Neuropathy/
– retinopathy /*see* Retinopathy/
Computer, Computing /*see also* Information; Model/
– expert system – nutrition A34
Connective tissue stiffening – diabetes 79
Contraceptive – oral – diabetes – endothelial function A202
Cow's milk – protein – antibody 683c
– Type 1 diabetes, role in? 364
Cystic fibrosis – insulin resistance A149
– proinsulin and conversion fragments, serum A118

D

Dawn phenomenon – treatment – bedtime insulin – Semilente A160
Depression – diabetes A185
Dermatan sulphate /*see* Glycosaminoglycan/
Diabetes mellitus
– care – family practice, in A35
– – programme A34
– – protocol – cost-effectiveness – Moscow A157
– – – Staged Diabetes Management (DCCT) A156
– – shared A34

– – standard – general practice A 156
– chronic calcific, tropical – genetics 972c
– classification – Bangladesh A 46
– congenital – absence of islet B-cells 352
– fibrocalculous pancreatic 972c
– lipoatrophic – insulin resistance 1288
– lipodystrophic – Seip-Berardinelli 172
– malnutrition-related A 46
– screening – HbA_{1c} A 159
– streptozotocin-induced – transmission to offspring 1245
(Diabetes) – Type 1 – adoptive transfer – bone marrow transplantation 541
– – disease-modifying therapy *[see also* Immunotherapy, Nicotinamide*]* A 171
– – – symposium *News Section* 51w
– – – cyclosporin *vs* FK 506 A 101
– – – GAD antibody A 45
– – – immunoglobulin A 62
– – – insulin A100, A 171
– – – nicotinamide & methylprednisolone A 101
– – – probucol? A 100
– – – sulphonylurea A 171
– – epidemiology *[see also* Epidemiology*]* 883r
– – heterogeneity – age, HLA-DQ & autoantibodies 1155
– – – childhood *vs* adult A 58
– – islet B-cell function *[see* B-cell*]*
– – management – consensus guidelines *News Section* 50w
– – prediction *[see* Insulitis; Prediabetes; Prediction*]*
– – remission, spontaneous A132, A 170
– – susceptibility – HLA Class II – mechanism 1210
– – viruses, role of 687r
(Diabetes) – Type 2 – definition 978r
– – diet-treated – progression, prediction of A 79
– – pathogenesis 176r
– – – errors of metabolism or of methods? 1326
– – – intrauterine and neonatal nutrition 267c
– – – thrifty genotype hypothesis 267c
– – progression A 178
– – – B-cell and A-cell glucose sensitivity A 118
– type, determination of – young adults A 99
Diazoxide – NOD mouse diabetes incidence, effect on 487
Diet – calcium – bone mineral, effect on – childhood diabetes A 58
– carbohydrate – starch type, wheat *vs* bean – metabolic effects A 163
– fasting *[see* Fasting*]*
– fat composition – diabetes, effects in A163, A 165
– – erythrocyte lipid, effect on A 164
– – hypertension, effect on – diabetes A 164
– fat, high – pyruvate dehydrogenase, effect on – rat A 162
– fatty acid – ω-3 – metabolic effects A 194
– fibre – oro-caecal transit time, effect on – dog 207
– fish oil – diabetes A 164
– – glucose tolerance, effect on – diabetic rat A 123
– fructose – glucose-sparing effect 338
– liberalised – diabetes – Type 1 A 33
– lipids – skeletal muscle, effect on – glucose metabolism A 132
– malnutrition *[see* Diabetes – malnutrition-related*]*
– propionate – metabolic effects – normal rat A 133
– protein – diabetes – Type 2 829
– weight-reducing – monounsaturated fat, benefits of A 163
Digoxin-like immunoreactive factor – diabetes A 49
DNA *[see also* Genetics*]*
– mitochondrial – diabetes pathogenesis, role in? 578c
Dog – oro-caecal transit time 207
Dyspepsia – diabetic autonomic neuropathy 948

E

EASD – fellowships *News Section* 44
– General Assembly (Suppl 1) I
– News Section *Following pages* 92, 174, 268, 370, 474, 580, 790, 882, 974, 1218
– prizewinners *News Section* 40
– Scientists Training Course 1994 *News Section* 32
– Study Group – Diabetic Pregnancy (DPSG) *News Section* 24w
– – Artificial Insulin Delivery . . . (AIDSPIT) *News Section* 47w
– – Diabetic Eye Complications (EASDEC) 18w
– – DOIT *News Section* 11w, 28w
– – Epidemiology (EDESG) 33w
– – Eye Complications (EASDEC) 35w
– – Lipid *News Section* 15w
Editorial – Epilogue 1219
– News and Views from the Editor 1
Education, diabetes – childhood A 157
– diet – expert system A 34
– group A 157
– insulin 99
– intensive insulin – evaluation at 3 yr A 157
– Type 1 – glycaemic control A 33
Elastin – arterial – diabetes, changes in 445
Embryo – diabetes, maternal – superoxide dismutase, protection by – mouse A 41
– GLUT expression – glucose, effect of A 166, 696
Endothelium, Endothelial *[see also* Capillary*]*
– cell – activation inhibitor A 202
– – death – streptozotocin-diabetic rat 926
– – fibrinolytic activity – sulphonylurea, effect of A 203
– – glucose, effect of – antioxidant activity A 203
– – proliferation – hypoxia, effect of A 20
– – retinal – cloned A 202
– – – culture 808
– – VLDL subfraction metabolism – Type 1 diabetes 258
– function – diabetic neuropathy, role in 516
– – von Willebrand factor and 472c
– – – *Erratum* 685c
– GLUT 1 – nerve capillary 133
– permeability – streptozotocin-diabetic rat 926
– relaxing factor – glucose, effect of A 12
Endothelin – 1 – expression – diabetic macrovascular disease A 203
Epidemiology *[see also* Mortality*]*
– blood pressure – insulin resistance A 71
– diabetes – methods – fasting blood glucose x2 A 176
– – Romania A 174
– – Turkey A 176
– – Type 1 883r
– – – birth order A 16
– – – familial recurrence – Denmark 870
– – – Finland 1303
– – – geographical variation – Estonia A 174
– – – parental sex A 16
– – – Sardinia 547
– – – secular trend 547, A 175
– – – short-term variation in incidence – Italy A 175
– – – Sudan A 176
– – – Switzerland A 175
– – – UK 1282
(Epidemiology – diabetes) – Type 2 978r
– – – ethnic variation – proinsulin-like molecules A 177
– – – – UK A 174
– – – Japan 1198
– – WHO criteria – Italy A 174
– European Study Group (EDESG) *News Section* 33w
– impaired glucose tolerance – Japan 1198
– nephropathy – diabetes – Type 2 1007
– renal failure in Type 2 diabetes – Europe 1099
Epinephrine *[see* Adrenaline; Catecholamine*]*
Erythrocyte – Ca^{2+} – insulin, effect of 146
– Mg^{2+} – insulin, effect of 146
– pH – insulin, effect of 146
Evening primrose oil – nerve, effect on – streptozotocin-diabetic rat 397, 1132
Exercise – CSII A 21
– expired air $^{12}CO_2$:$^{13}CO_2$ ratio A 153
– fibrinogen, plasma – Type 2 diabetes A 22
– glucose utilisation – non-esterified fatty acids, effect of A 153
– insulin secretion – naloxone, effect of A 21
– – islet transplantation – rat A 188
– metabolic effects – C-peptide, role of A 22
– – Pima 863
– – Type 2 diabetes – non-obese A 21
– training – glycaemic control, effect on – diabetes A 154
– – heart insulin sensitivity A 21
– – insulin sensitivity – ageing, effect of A130, A 153
– – islet B-cell changes A 112
– – lipid metabolism, effect on – obese diabetics A 154
Eye *[see also* Cataract, Retina*]*
– complications – European Association for the Study of *News Section 18* w, 35w

F

Factor analysis – hypoglycaemia symptoms 771
Fasting – glucose tolerance, effect on – Type 2 diabetes A 46
– short-term – Randle cycle A 124
Fat *[see* Adipose tissue*]*
– distribution – insulinoma 91 c
– – Pima 863
Fatty acid – essential – neuropathy, prevention of – diabetic rat 397
– γ-linolenic 397
– non-esterified – amino acid balance, effect on A 144
– – glucose & lipid metabolism regulation, in A 142
– – glucose metabolism, effects on A 54
– – insulin secretion, effect on A 116
– – liver – insulin, increased by A 140
– – oxidation – glucocorticoid, effect of – rat 899
– ω-3 – vasodilator responses, effect on 33
– ω-3 *vs* ω-6 – nerve, effect on – streptozotocin-diabetic rat 1132
Fenugreek – insulin secretion, effect on A 119
Fetus – amylin expression – diabetes, maternal – rat A 42
– growth – impaired – future Type 2 diabetes 225, 973 c
– heart – echocardiography – diabetes A 167
– IGF expression – diabetes, maternal – rat A 42
– lactate – maternal streptozotocin diabetes A 166
– macrosomia – maternal glucose intolerance, relation to – rat A 42
– – maternal lipids – gestational diabetes A 167
Fibroblast – glycosaminoglycan N-deacetylase 536
– human skin – HDL, effect of 942
– Na^+/H^+ antiport – microalbuminuria – Type 2 diabetes A 11
Fish oil – nerve, effect on – streptozotocin-diabetic rat 1132
Fluorosis – endemic – impaired glucose tolerance in 826
Foot *[see also* Neuropathy*]*
– diabetes – medial arterial calcification 615
– – ulceration – geographical variation A 158
– – venous pressure – neuropathy A 71
– pedobarography – diabetic neuropathy A 73
Free radical – insulitis, role in 470 c
Fructose – 2,6-bisphosphonate – glycolysis, regulation of 581 r
– infusion – glycogenesis A 145
– metabolic fate – human 338

G

G-protein *[see* Insulin – secretion – G-protein*]*
– activator – mastoparan – insulin secretion, effect on A 109
GAD (Glutamic acid decarboxylase) *[see* Antibody; Antigen; Glutamic. . .*]*
Galanin – derivative peptides – activity – insulin secretion, inhibition of A 104
– synthetic – effect in man 653
Gastric – emptying – diabetes A 195
– – oral glucose tolerance test, effect on 857
– inhibitory peptide *[see* GIP*]*
Gastroparesis – insulin requirement, effect on A 49
Gender *[see* Sex*]*
Gene – expression – islet *[see* Islet – gene*]*
Genetics – chromosome – 7 – glucokinase gene 170
– diabetes – gestational – glucokinase A 84
– – NOD mouse – MHC Class III 727
– – Type 1 – family study – Denmark 870
– – – – recurrence risk to age 60 A 89
– – – HLA – Class II 1210
– – – – DQ 371 r
– – – – – heterogeneity 1155
– – – – DQB1(Asp 57) not protective? A 89
– – – – DR2 A 17
– – – insulin gene – insulin antibodies? A 89
– – – interleukin-1β receptor antagonist A 17
– – – protection – HLA-DQ 252
– – – TAP gene polymorphism A 17
– – – twin study A 89
(Genetics – diabetes) – Type 2 – apo E & sex 229
– – – apo D A 84
– – – FABP2 A 84
– – – family study A 169
– – – – glucose tolerance after 25 yr A 73
– – – fertility advantage A 175
– – – glucokinase gene 141, 269 r, 409, 433, 581 r, 633, A 3, A 4, A 84
– – – glycogen synthase gene A 83
– – – glycogen synthesis proteins A 83
– – – HLA 234
– – – insulin gene RFLP 25
– – – maternal *vs* paternal diabetes A 85
– – – mitochondrial gene 578 c, A 3
– – – – deafness A 3
– – – MODY A 4
– – – twin study – unreliable method 471 c
– diabetic retinopathy 1293
(Genetics) – Gm – diabetic retinopathy 1293
– hexokinase II 1299
– HLA – diabetes – Type 2 234
– – diabetic retinopathy 1293
– – DQ – diabetes – Type 1 252
– insulin receptor substrate 1 335
– insulin resistance – insulin receptor gene A 4
– Km – diabetic retinopathy 1293
– MHC – Class III – NOD mouse diabetes 727
– Seip-Berardinelli syndrome 172
Genistein A 32
GIP (glucose-dependent insulinotropic peptide)
– insulinotropic effect – amino acids, effect of A 48
GLIP (glucagon-like insulinotropic peptide) *[see* GLP – 1 – (7-36)amide*]*
Glomerular – basement membrane – pentosidine formation 936
– – ultrastructure – freeze-etch method A 222
– capillary – morphology – streptozotocin-diabetic rat 189
– charge selectivity – diabetic nephropathy A 217
– – streptozotocin-diabetic rat A 220
– – Type 1 diabetes 244
– filtration rate – measurement – ^{51}Cr-EDTA bolus A 219
– function – diabetes – Type 2 – Pima Indians A 27
– – diabetic nephropathy 1064
– – nitric oxide inhibition, effect of – diabetic rat A 220
– heparan sulphate – diabetes 310
– – streptozotocin-diabetic rat A 219
– histology – autopsy – glycaemic control 1057
– hyperfiltration – ascorbic acid, effect of A 218
– – atrial natriuretic peptide A 217
– – kallikrein excretion 423
– mesangial cell *[see* Mesangial – cell*]*
– size selectivity – Type 1 diabetes 244
– stereology – diabetic nephropathy 1064
– – microalbuminuria, in 523
– structure – microalbuminuria – diabetes – Type 1 A 27
GLP (Glucagon-like peptide)
– 1 (7-36 amide) – action – high amino acid levels, effect of A 48
– – glucose tolerance, effect on – rat A 47
– – hepatocyte – glycogenesis A 38
– – Type 2 diabetes, effect in 741, A 38, A 47, A 48
– receptor – islet B-cell – glucagon cross-reaction A 39
– – liver A 39
– – skeletal muscle A 39
Glucagon – analogue – 1067 – islet B-cell specificity, partial A 127
– gene – transcription – pancreatic – glucagonoma, effect of A 66
– gluconeogenesis, effect on – diabetic rat 292
– hepatocyte, actions in – rat A 127
– hypoglycaemia, response to – IGF-I, effect of 966
– intranasal – hypoglycaemia treatment 931
– like peptide *[see* GLP*]*
– secretion – galanin, effect of 653
Glucagonoma – anorectic substance – not proglucagon-derived A 127
Glucocorticoid – cortisol – hypoglycaemia, response to – IGF-I, effect of 966
– glycogen synthase expression, effect on A 53
– insulin resistance – lipid oxidation, role of 899
– insulin secretion, effect on 84
Glucokinase 269 r, 581 r
– distribution – islet A 102
– gene – polymorphism 170, 409, 433
– – Type 2 diabetes 141, 269 r, 409, 433, 633
– islet – first discovery 1215 c

– liver – diabetic rat, increased in – glucotoxicity role 292
– mutation – MODY – islet B-cell function A 67
Gluconeogenesis – liver – glucotoxicity, role of – diabetic rat 292
Glucose – 6-phosphatase – short-term regulation – rat A 141
– blood level – perception A 152
– cycling – hepatic – in man A 142
– – insulin resistance, role in – Type 2 diabetes 106
– dependent insulinotropic peptide *[see* GIP*]*
– disposal – insulin-independent – alloxan diabetes A 147
– – insulin-mediated – diabetes – Type 1 52
– effectiveness – cirrhosis 121
– labelled – 6,6-^{2}H 1185
– monitoring – sc 658
– production – closed-loop insulin infusion – Type 1 diabetes 1185
– – hepatic – autoregulation A 140
– – – diabetic rat A 146
– – lipoatrophic insulin resistance 1288
– sensor *News Section* 47w
– – implantable A 38
– – – on-line calibration & use in man 658
– – paracetamol (acetaminophen), insensitive to A 152
(Glucose) – tolerance – fluoride, effect of 826
– – impaired – exercise, effect of – Pima 863
– – – low birth-weight and 225, 973c
– – – progression to diabetes 553
– – oral – gastric emptying, effect of 857
– – screening – Japan 1198
– transport – retina 808
– – skeletal muscle – Type 2 diabetes A 23
– – vanadate, effect of – adipocyte 113
– transporter *[see* GLUT*]*
– turnover – hyperglycaemia, effect of – Type 2 diabetes A 148
– – measurement – clamp – labelled *vs* unlabelled glucose A 145
– – – dual-tracer, variable-vol. *vs* hot GINF A 143
– – – tracer bolus – Type 2 diabetes A 147
– uptake – liver – portal *vs* peripheral route – dog A 141
Glucotoxicity *[see* Insulin – secretion*]*
GLUT (Glucose transporter) *[see also* Embryo, Endothelium, Mouse, Growth, Muscle, Nerve, Retina*]*
– diabetes – Type 2 176r
– expression – dexamethasone, effect of – adipocyte – rat A 22
– – embryo – glucose, effect of – rat 696
– – growth hormone, effect of – skeletal muscle – rat 475
– insulin-secreting cell 1204
– 1 – expression – insulin-induced – insulin receptor, role of A 23
– – nerve 133
– – regulation – perineurial sheath *vs* skeletal muscle A 134
– – skeletal muscle 475
– 2 – liver – diabetic rat, increased in – phlorizin, effect of 292
– – pancreas – Type 2 diabetes A 73
– 3 – fetal muscle satellite cell A 134
– – retinal pericyte – glucose *vs* galactose, effects of 808
– 4 – expression – skeletal muscle – *fa/fa* rat – metformin, effect of 481
– – – skeletal muscle – glucocorticoid, effect of 899
– – insulin, activation by – MAP kinase not involved A 140
– – skeletal muscle 475
– – – translocation – insulin-induced A 23
– – – triglycerides and A 134
– – translocation – insulin *vs* cAMP, induced by A 134
Glutamic acid decarboxylase – autoantigen – species specificity 39
Glycaemic control – cell-membrane composition, effect on – Type 1 diabetes 850
– diabetes – monitoring – leucocyte alkaline phosphatase A 160
– – neuropathy, effect on 68
– – – EURODIAB A 176
– diabetic nephropathy, effect on 1051, 961
– diabetic retinopathy, subsequent 961
– diet, effect of – protein – Type 2 diabetes 829
– glomerular stereological changes – Type 1 diabetes 523
– glomerulosclerosis and – UDPG study 1057
– heparan sulphate synthesis, effect on – diabetic rat 310
– insulin resistance, effect on – Type 1 diabetes 346
– measurement – HbA1 *vs* blood glucose 428
– microalbuminuria, effect on – longitudinal study 1309
– monitoring *[see also* Glucose – sensor*]*
– – urinary pentosidine 664
– renal function, effect on – Type 1 diabetes 734
– retinopathy and – Pima 428
– urinary N-acetylglucosaminidase, effect on 835
Glycation – advanced end-product *[see also* Aminoguanidine; Collagen; Maillard reaction*]*
– – diabetic nephropathy, in A 221
– – bone matrix, effect on – – rat 802
– – diabetic complications A 191
– – LDL, contribution of A 81
– – mesangial cell, effect on A 81
– – pentosidine – urinary 664
– – skin – Type 2 diabetes A 200
– albumin – plasma escape rate 361
– collagen – joint mobility – diabetes 79
– fibronectin – endothelial cell, effect on A 82
– germanium compounds, inhibition by A 82
– haemoglobin *[see* HbA_{1c}*]*
– immunoglobulin M – glycaemic control, marker of A 200
– inhibitor – D-lysine 797
– lipoprotein A 199
– prolactin A 201
– protein – diabetes – deoxyhexitol, role of A 200
Glycerophosphate dehydrogenase – FAD-linked – GK rat islet 722
Glycogen – cycle – insulin resistance 1221r
– hepatic – kinetics – measurement – non-invasive A 143
– synthase – activation – muscle *vs* liver – glucose route, effect of A 147
– – diabetes – Type 2 176r
– – – rhesus monkey 200
– – expression – glucocorticoid, effect of A 53
– – sequence – human liver A 53
– synthesis – glucocorticoid, effect of – rat 899
– – hepatic – gluconeogenic from lactate A 144
Glycogenolysis – vanadate, effect of – isolated perfused rat liver 602
Glycolysis 581r
– islet – diabetic rats 305
Glycosaminoglycan – atherogenesis – diabetes 316
– heparan sulphate 1119r
– – synthesis – diabetic nephropathy 536
– – – diabetic rat 310
– N-deacetylase – diabetic rat 316
– – fibroblast – diabetic nephropathy 536
GMP – cyclic – islet – interleukin 1β, effect of 9
Growth – factor – fibroblast – angiogenesis 282
– – insulin-like *[see* IGF*]*
– – nerve – CGRP expression A 20
– fetal – Reaven syndrome 62
– hormone – binding protein – childhood diabetes 239
– – glomerular function, effect on A 221
– – GLUT expression, effect on – rat muscle 475
– – plasma – galanin, effect of 653
– – – IGF-I, effect of in Type 1 diabetes 675
– – receptor – INS-1 cell line A 137
– – secreting cell – GH_3 475
– – therapy – metabolic effects A 138
– renal – streptozotocin-diabetic rat 1126
Gut – motility – dyspepsia and – Type 1 diabetes 948
– oro-caecal transit time – measurement – breath hydrogen 207

H

Haemoglobin – fetal – in adults with Type 1 diabetes 129
– glycated *[see* HbA_{1c}*]*
Haemostasis – diabetes 1119r
– – albumin excretion rate and 1045, A 215
– IGF-I, effect of A 126
– von Willebrand factor – diabetic retinopathy 472c
Hamster – CHIG/Han – hyperinsulinaemia A 87
Hare – amylin and amyloid 183
HbA_1, HbA_{1c} – assay – autoanalyser – ion capture A 160
– – interference – HbF (fetal haemoglobin) 129
– – – Hb Graz A 159

– – – Hb Okayama A 159
– – portable analyser – DCA 2000 A 157
– diabetic retinopathy and – prospective study – Pima 428
Heart – carnitine, effect of – diabetes A 7
– coronary disease – angioplasty restenosis – diabetes A 209
– – silent – diabetes A 208
– – – diabetic neuropathy A 72
– – – twins – Type 1 diabetes A 8
– G-protein – diabetes – *ob/ob* rat A 12
– glucose uptake, myocardial – diabetes A 7
– left ventricular function – diabetes A 8, A 213
– – streptozotocin-diabetic rat 195, 880c
– left ventricular hypertrophy – Na^+/Li^+ transport – diabetes A 7
– microvascular angina – insulin resistance A 8
– myocardial cytoarchitecture – diabetes A 7
– myocardial type VI collagen – diabetes 93
– perfusion 195
– positive inotropic therapy – ibopamine – diabetes A 213
Heparan sulphate *[see* Glycosaminoglycan*]*
Hepatitis – B – vaccination – diabetes A 34
Hexokinase – II – gene polymorphism 1299
HLA *[see also* Genetics*]*
– Class II – Type 1 diabetes – cow's milk protein interaction? 364, 1214c
– association – control population, importance of 1208
– DQ molecules – peptide presentation and 371r
– – Type 1 diabetes, role in 371r
Homocystine – Type 2 diabetes A 16
HPLC (High-performance liquid chromatography) – urinary pentosidine 664
Hypercholesterolemia – treatment – simvastatin – renal effects 1079
Hyperfiltration *[see* Glomerular – hyperfiltration*]*
Hyperglycaemia – chronic – islet B-cell function, effect on A 74
– insulin secretion, potentiation of 589
Hyperlipidaemia *[see also* Hypercholesterolaemia; Hypertriglyceridaemia; Reaven's syndrome*]*
– combined – obesity, with – insulin resistance A 193
Hyperosmolar non-ketotic coma, diabetic A 172
Hypertension – diabetic nephropathy – sodium restriction, effect of A 218
– glucose tolerance A 133
– Type 2 diabetes *[see also* Reaven's syndrome*]*
– – capillary permeability 57
– – Na^+/Li^+ countertransport 52
– – oxidative stress 265
– – insulin resistance 642, A 77
– – microalbuminuria 835
– – urinary N-acetylglucosaminidase 835
– insulin resistance and – animals, lack of association in A 131
– insulin-resistant non-diabetic – metformin treatment A 78
– intracellular signalling – ITP-mediated – Type 2 diabetes A 178
– myocardial collagen 93
– prediabetes Type 2 1002
– – albuminuria, prediction of 998
– treatment in diabetics A 211, A 212
Hyperthyroidism – glucose tolerance A 149
Hypertriglyceridaemia – insulin resistance in A 133
– plasminogen activator inhibitor 1 817
– treatment – gemfibrozil – diabetes 161
Hypoglycaemia – brain volume, effect on 530
– awareness – posture, effect of A 150
– brain fuel – ketones? 1191
– cerebral blood flow, effect on 73, 530
– cognitive function, effect on 73, 329, A 151
– counterregulation – fatty acids, effects of A 54
– – IGF-I, effect of 966
– – ketones, effect of 1191
– – lipolysis, role of A 18
– – sex differences 460
– extracellular glucose levels during A 18
– glucose metabolism, effect on A 18
– intensive insulin treatment, during 99
– lactate, effect of A 19
– myocardial substrate metabolism A 150
– questionnaire A 151
– relative – rate of fall – noradrenaline response A 150
– symptoms – factor analysis 771
– treatment – glucagon – intranasal 931
– unawareness A 151
– – growth hormone response A 150
– – reversibility A 37
Hypoglycaemic agent – α-glucosidase inhibitor – acarbose A 183
– – miglitol A 183
– AY-4166 A 182
– benzoic acid derivative – AG-EE 388 A 183
– BRL 49653 – *ob/ob* mouse A 75
– – *fa/fa* rat A 184
– carnitine A 142
– creatine A 199
– CS-045 A 182
– dexfenfluramine A 184
– efaroxan – sulphonylurea potentiation A 104
– etomoxir A 75
– fenugreek seed extract – YS 67 A 119
– *Ficus carica* extract A 181
– KAD-1299 A 181
– LY282449 A 182
– *Momordica charantia* extract A 181
– oral – secondary failure – duration of diabetes and A 80
– peroxovanadate 113, A 179
– sulphonylurea *[see* Sulphonylurea*]*
– vanadate 113, 602, A 180
– vanadyl sulphate A 179, 218
Hypolipidaemic agent – benfluorex A 146
Hypothyroidism – transfer by bone marrow transplantation 541

I

IAPP (Islet amyloid polypeptide) *[see* Amylin*]*
IGF-I – angiogenesis 282
– childhood diabetes 239
– counterregulation, effect on – Type 2 diabetes 966
– glomerular mesangial cell – effect on – glucose modulation 276
– – production by – glucose, effect of A 19
– insulin sensitivity, effect on A 68
– lipoprotein profile, effect on – Type 2 diabetes 465
– metabolic effects A 125
– – insulin receptor mutant A 68
– neuropathy, diabetic A 20
– plasma – glucose intolerance, in A 125
– treatment – Type 1 diabetes – adolescence 675
– vitreous – ischaemic eye disease A 20
IGF-II – gene – Type 2 diabetes 25
Immunotherapy – Type 1 diabetes *[see* Diabetes – Type 1 – disease-modifying therapy; Mouse; Rat*]*
Impotence – nocturnal tumescence studies 745
– prevalence – diabetes 745
Infection – diabetes – mortality A 172
Inflammation – neurogenic – streptozotocin-diabetic rat 493
Information system – diabetes care – DOIT workshop *News Section* 11w, 28w
Instructions to Authors *Advertisement pages, Janury & July issues*
Insulin – action – amino acid metabolism – splanchnic A 148
– analogue – fast-acting A 30
– – – B28Lys, B29Pro human A 155, A 156
– – – Ly275585 A 155
– – hepatoselective A 30
– – intermediate-acting – Des(64,65)-proinsulin A 155
– – slow-acting – Co(III) complex A 31
– assay – true A 120
– autoimmune syndrome – HLA association A 94
– erythrocyte, effect on – nuclear magnetic resonance spectroscopy 146
(Insulin) – gene – enhancer – CT box binding protein A 66
– – RFLP – Type 2 diabetes 25
– – transcription A 65
– immunogenicity – gestational diabetes A 56
– – intravenous or intraperitoneal infusion A 161
(Insulin) – infusion – closed-loop – hepatic glucose production 1185
– – device *News Section* 47w
– – – atmospheric pressure, effect of A 161
– – intraperitoneal – hypoglycaemic counterregulation A 19
– – – immunogenicity A 38
– – – long-term A 37
– – pulsatile – lipid metabolic effects A 54

– injection device – pen – bubble, effect of on kinetics & accuracy A 162
– intracellular – action – insulin resistance A 121
– – processing A 121
– intranasal A 160
– preparation – fibre complex A 162
(Insulin) – receptor – antibody 628
– – assay – small biopsy – immunofluorescence A 122
– – cell-membrane composition & fluidity, effect of A 204
– – Cushing's syndrome, expression in A 122
– – gene – diabetes, Type 2 176r
– – – mutation – null A 52
– – – – Rabson-Mendenhall syndrome 1168
– – – – Seip-Berardinelli lipodystrophic diabetes 172
– – – – Type A insulin resistance 414
– – – – tyrosine kinase 414
– – inhibitor – synthetic A 52
– – internalisation – monocyte 1163
– – isoforms – IR substrate-1, effects on A 52
– – – Type 2 diabetes 628
– – partially purified – skeletal muscle 668
– – protein kinase C interaction A43, A 44
– – regulator – α_2-Heremans-Schmid glycoprotein A 43
– – signalling proteins A 121
– – substrate 1 – analogue A 52
– – – gene 335
– – tyrosine kinase – monocyte – insulin resistance 1163
– – – diabetic rat – euglycaemia, effect of A 121
– – – relatives of Type 2 diabetics 668
– – – sequences and activity A 43
– – – Type 2 diabetes 176r
(Insulin) – requirement – Type 1 diabetes – IGF-I, effect of 675
– resistance – adipocyte – membrane protein insertion A 129
– – ageing – lipid oxidation, role of A 69
– – amylin-producing tumour, no effect of 843
– – diabetes – Type 1 – glycaemic control, effect of 346
– – – Type 2 – hypertension & microalbuminuria 642
– – fibroblast – glucose-induced – protein kinase C in A 69
– – fluorosis, in 826
– – genetics 269r
– – gestational diabetes, following A 64
– – glucocorticoid-induced – lipid oxidation, role of 899
– – glucose cycling, role of – Type 2 diabetes 106
– – glycogen synthase – diabetes – Type 2 – monkey 200
– – hyperinsulinaemia, induced by – normal rat A 123
– – hypertriglyceridaemia and 161, A131, A132, A133
– – lipoatrophic – hepatic glucose production 1288
– – measurement – relevance to pathogenesis of diabetes 1326
– – mental stress, effect of A 186
– – metformin, effect of – *fa/fa* rat 481
– – myocardial – streptozotocin-diabetic rat 195, 880c
– – Na^+/Li^+ countertransport 52
– – non-esterified fatty acid levels A 129
– – noradrenaline, effect of A 144
– – normoglycaemic non-obese – monocyte tyrosine kinase 1163
– – obesity – glycogen cycle 1221r
– – progesterone-induced A 129
– – progression to diabetes 553
– – Rabson-Mendenhall syndrome – insulin receptor gene 1168
– – regression model A 85
– – relatives of Type 2 diabetics – tyrosine kinase activity 668
– – Seip-Berardinelli syndrome 172
– – skeletal muscle – hypomagnesaemic rat A 123
– – – insulin receptor substrate-1, role of A 53
– – – phospholipid fatty acid composition A 132
– – – protein phosphatase-1-glycogen A 124
– – – resting blood flow 876
– – – Type 2 diabetes – glycogen synthase A 123
– – smoking 1275
– – Type 2 diabetes, role in 176r
– – Type A – insulin receptor mutation 414
– – uraemia – calcitriol, effect of A 69
– – vanadate, effect of – rat 602
(Insulin) – response – early prandial A 79
– – impaired – insulin sensitivity normal A 142
– secreting cell *[see also* B-cell, pancreatic; Insulinoma*]*
– – α_2 adrenoceptor – mRNA subtypes A 81
– – antigen – NOD mouse T-cell activation by 385
– – Ca^{2+} – imaging – interactive laser cytometry A 107
– – electrofusion – RINm5F-NEDH rat pancreatic cell A 31
– – glucose-sensitive – MIN6 A 114
– – HIT – GLUT-1 inhibition, effect of 1204
– – INS-1 – growth hormone & prolactin receptors A 137
– – MIN6 – glucose metabolism 1139
– – transfected – pituitary AtT20 A 31
(Insulin) – secretion – Ca^{2+} – signalling – protein kinase II, role in A 110
– secretion *[see also* B-cell, pancreatic;Islet; Insulin -secreting cell Proinsulin*]*
– – acetyl Co-A carboxylase, role of A 75
– – actin, role of A 33
– – ageing, effect of A 118
– – α_2 adrenoceptor, effect of – actin polymerisation A 119
– – amylin, differential release of 570
– – amylin-producing tumour, effect of 843
– – ATP, role of A 110
– – autoregulation A 104
– – basal – oscillatory – insulin sensitivity, effect on A67, A 68
– – Ca^{2+} – glucose, effect of – triphasic early response A 107
– – – intracellular gradients A 32
– – – veratridine, effect of – K^+ ATP channel, role of A 107
– – cholinergic agonists, effect of – diacylglycerol role A 119
– – cirrhosis 121
– – computer model A 68
– – DBI, effect of A 118
– – diabetes – Type 1 – early A 98
– – – Type 2 A 74
– – direct feedback inhibition – glycosylphosphatidylinositol A 125
– – exocytosis – G protein involvement A 110
– – – phosphorylation, role of A 110
– – – protein kinase A and C A 111
– – fatty acid, stimulation by A 33
– – G-protein – activation – galanin *vs* somatostatin A 109
– – – prenylcysteine analogues mimicking A 117
– – GAD, role of A 115
– – galanin, effect of 653
– – gestational diabetes A 168
– – GK rat 3
– – glucagon-induced – diabetes – Type 2 A 177
– – glucocorticoid, effect of 84
– – glucose potentiation – ageing, effect of A 116
– – – normal rat 589
– – – site of glucose absorption A 117
– – glucose sensitivity 1204
– – – GLP-1, enhancement by A 39
– – – glucose transport, effect of A 23
– – glucose-inhibited – diazoxide, protection by A 104
– – – Type 2 diabetes A 74
– – glucose-stimulated – biphasic – nitric oxide in A 115
– – – glucose potentiation 1238
– – glucotoxicity – mechanism A 117
– – glutamate, stimulation by A 116
– – impaired glucose tolerance A 177
– – inhibitory agonist, effect of – G protein involvement A 111
– – interleukin 1β, effect of 791
– – K^+ ATP channel – inhibitor – SDZ PCO-400 A 107
– – – intracellular pH, effect of A 60
– – – polymyxin B, effect of A105
– – lithium, effect of A 115
– – minimal model A 120
– – nicotinamide, effect of 675
– – nitric oxide – role of – nitrosoglutathione study A 116
– – – synthase inhibitor, effect of A 114
– – nutrient regulation of 370b
– – oscillatory A 32
– – peptide YY, effect of A 128
– – protein kinases, role of A113, A 114
– – protein phosphatase, role of – serine/threonine A 59
– – sulphonylurea-induced – Ca^{2+} uptake 791
– – – interleukin 1β, effect of 791
– – – K^+ ATP channel 791
– – temperature, influence of – pertussis toxin, effect of A 112

– – transfected FAO hepatoma cell 1322
– – Type 1 diabetes – onset 358
– – tyrosine kinase, role of A113, A114, A32
– – VIP, effect of – mouse islet 920
(Insulin) – sensitivity – measurement – minimal modelling A129, A133
– subcutaneous – injection site – glycaemic control, effect on 752
– – pharmacokinetics 752
– transdermal – iontophoresis A161
– treatment – acidaemia, acute exacerbation of 813
– – intensive 99
– – – cerebral blood flow A37
– – – hypoglycaemia risk, assessing A152
– – – long-term A37
– – Type 2 diabetes A76
Insulinoma – body fat distribution 91c
– cell – proinsulin and protein biosynthesis A108
– insulin resistance induced by A130
Insulitis – imaging in vivo – ^{123}I-interleukin 2 A36
– – ^{99m}Tc-immunoglobulin A36
– immunocyte subset quantitation – BB rat 1146
– macrophage, role of 470c
– MHC-dependent – BB rat A9
– nitric oxide involved? 470c
– offspring of streptozotocin-diabetic rats 1245
Insurance – diabetes, effect of A185
Interleukin-1 – receptor – antagonist – islet cytokine toxicity studies 759
– – – polymorphism – Type 1 diabetes A96
– – hybrid gene with insulin gene – protective effect A83
– – islets, expression in A96
– β – islet cell, effect on – DNA damage – comet assay A77
– – – function 9
– – – mechanism A95
Ion channel – islet cell */see* B-cell, pancreatic; Islet; Insulin – secreting cell; Somatostatin cell/
Iron – lysosomal-associated – alloxan cytotoxicity, role in 707
Islet – amyloid polypeptide (IAPP) */see* Amylin/
– ATP – biosynthesis A111
– Ca^{2+} – influx pathway, novel A105
– – oscillations – caffeine-sensitive A106
– – oscillations – fast – glucose, effect of A106
– – oscillations – insulin release and A105
– – VIP, effect of 920
– cAMP – interleukin 1β, effect of – rat 9
– capillary permeability – diabetic BB rat 682c
– cell – cluster – culture A102
– – lysis – nitric oxide – protection A82
– – rat – activated macrophage, effect of 17
– cGMP – interleukin 1β, effect of – rat 9
– culture – amylin release – rat 570
– electrical activity – VIP, effect of 920
– function – ageing – rat A102
– – human – Type 2 diabetes A103
– gene expression */see also* Islet – protein/
– – REG gene A6
– glucose metabolism – GK rat 305
– – glycolysis, related to? A103
– glutamate, L – transporter – transcription, lack of A80
– glutamic acid decarboxylase – species differences 39
– GTP – biosynthesis A111
– histology – diabetic rhesus monkey 378
– human – amyloid – amylin and 323
– interleukin-1 – α *vs* β, effect of – B-cell specificity 759
– – β, effect of – G-protein, role of A83
– isolated – insulin secretion A80
– K^+ ATP channel – activator – BPDZ 44 A106
– mouse – VIP, effect of 920
– protein – connexin – mRNA A5
– – kinase C – isoform A5
– – nerve growth factor A6
– – pro-opiomelanocortin – mRNA A6
– response – D-glucose-stimulated – diabetic rats A86
– ventral *vs* dorsal pancreas – tumour necrosis factor, effect of A82
– virus, effect of 687r
Isoprenaline (Isoproterenol) – glucose transport, effect on – adipocyte A134

J

Joint – limited mobility */see* Cheiroarthropathy/

K

Kallikrein – urinary – diabetes – Type 1 423
Ketoacidosis, diabetic – erythrocyte membrane fluidity A172
– insulin, effect of – acute pH changes 813
Kidney */see* Renal/
Krebs cycle – tracer – glutamate labelling pattern A141

L

Lactate – glucose metabolism, effect of in vivo A143
– glycogen, effect on – liver – alloxan-diabetic rat A146
– turnover – obesity with Type 2 diabetes A148
Lactation – lipoprotein lipase, mammary – insulin sensitivity A167
Lactoferrin – islet protection against cytokine effects A96
Laminin – myocardium – diabetes 93
Lawrence, RD (1892-1968) *News Section* 27
Leprechaunism – insulin receptor null mutation A52
Lepus europaeus – amylin 183
Letters to the Editor 91, 267, 369, 470, 577, 682, 880, 972
Leukaemia – lymphoblastic – bone marrow transplantation 541
Lipase – hepatic – diabetes – Type 1 155
– inhibitor – Orlistat – glucose tolerance, no effect on A184
Lipid; Lipoprotein – (a) – cholesterol synthesis, effect on – diabetes A78
– – isoforms – diabetes 47, 881c
– – microalbuminuria and – Type 2 diabetes A193
– – retinopathy and – diabetes 88
– apo – (a) – diabetic nephropathy 438
– – – diabetic retinopathy 88
– – – IV – Type 2 diabetes A15
– – B-48 – cholesterol absorption A193
– – E – sex – Type 2 diabetes 229
– atherogenic subclasses – cardiovascular risk in diabetes A206
– cholesterol – synthesis – Type 2 diabetes A194
– composition – serum – Type 2 diabetes A192
– diabetes – Type 2 – insulin resistance A15
– dyslipidaemia – Type 1 diabetes – apo E polymorphism and A79
– HDL – cholesterol scavenging by – insulin excess, effect of 942
– LDL – hyperglycaemia, effect of A192
– – oxidation – diabetes A192
– lipase – insulin, effect of – pulsatile insulin delivery A54
– metabolism – diabetic nephropathy 438
– – Type 1 diabetes – intraperitoneal insulin,effect of A78
– oxidation – Insulin resistance and 899
– – insulin resistance 1221r
– – simvastatin, effect of – microalbuminuria, in A193
– profile – IGF-I, effect of – Type 2 diabetes 465
– Study Group *News Section* 15w
– triglyceridaemia – insulin resistance and 161
– – tumour necrosis factor and – Type 2 diabetes A79
– VLDL – hyperinsulinaemia, effects of A192
– – serum – plasminogen activator inhibitor 1 and 817
– – subfraction – endothelial metabolism – Type 1 diabetes 258
– – subfractions – diabetes 155
Lithium – hyperglycaemic effect – glucagon involved A127
– insulin secretion, effect on A115
Liver perfusion – vanadate, effect of – rat 602
LY83583 9
Lymphocyte – B – Type 1 diabetes – passive transfer to SCID mouse 510
– natural killer – BB rat 596
– T – islet-derived, NOD mouse, effect in 716
– – NOD mouse – rat insulinoma-cell proteins, activation by 385
– – receptor – monoclonal antibody – NOD mouse 391
Lysozyme – islet protection against cytokine effects A96

M

Macaca mulatta (rhesus monkey) – spontaneously diabetic 200, 378
Macrophage – activated – cytotoxicity – nitric oxide 17
– function – Type 1 diabetes A 93
– like cell – J-774 – alloxan toxicity 707
– NOD mouse – betacytotoxicity 1252
Macrosomia – maternal risk factor 117
Macrovascular disease *[see* Vascular*]*
Magnesium – depletion – Type 2 diabetes 767
– intracellular – measurement – ^{31}P-NMR spectroscopy 767
– serum – measurement – ion-selective electrode 767
– Type 2 diabetes A 179
Maillard reaction – D-lysine, inhibition by 797
– products 664
– – pentosidine 664, 936
Malnutrition *[see* Diabetes – malnutrition*]*
Matrix, intercellular *[see* Collagen; Elastin; Glycosaminoglycan*]*
Meal – insulin response – early, importance of A 79
Mesangial cell – proliferation – diabetic nephropathy 276
– thromboxane synthesis – glucose, effect of A 222
Metabolic control – diabetes *[see* Glycaemic control*]*
Metformin – *fa/fa* rat, effect in – GLUT-4 expression 481
Methylmalonic acidaemia – mutase-deficient 352
MHC *[see also* Genetics; HL; Insulitis*]*
– – molecular structure, three-dimensional 1214c
Microalbuminuria *[see also* Albumin – excretion rate*]*
– urinary N-acetylglucosaminidase and 835
– ascorbic acid, effect of – diabetic rat A 219
– assay – immunoturbidimetry 993
– – radioimmunoassay 993
– – sample storage & preparation 993
– blood pressure – diabetes A 214
– cardiovascular risk factor 1175
– development – glycaemic control and – Type 1 diabetes 1309
– – longitudinal study A 215
– diabetes – Type 2 – at diagnosis 835
– – – prevalence 1017
– fish oil, effect of – simvastatin and A 194
– genetic factor A 215
– glomerulus – stereology 523
– glycaemic control – Type 1 diabetes A 63
– hypertension and – Type 2 diabetes 835
– insulin resistance and – Type 2 diabetes 642, A 26
– intra-uterine growth and A 26
– prevalence – Type 2 diabetes A 215
– reversibility – Type 1 diabetes A 216
– risk factor – diabetes A 206, A 207
Microangiopathy *[see also* Endothelial; Fibroblast; Microalbuminuria; Nephropathy; Retinopathy. .*]*
– diabetic – marker – laminin P_1, serum A 202
Microvascular – function *[see* Capillary; Vasomotor*]*
Milk – cow – Type 1 diabetes, role in? 364
Minkowski Prize Winner Symposium *News Section* 21
Model, mathematical – insulin secretion A 68, A 120
– insulin sensitivity 121, A 129
MODY (Maturity-onset diabetes in youth) – genetics 269 r, 581 r
– heterogeneity A 178
– proinsulin levels A 67
Monkey, rhesus, spontaneously diabetic – glycogen synthase 200
– islet histology 378
Mortality – albumin excretion rate and 1030
– cardiovascular – lipoprotein composition and – Type 2 diabetes 1175
– diabetes – diabetic clinic patients – Japan A 173
– – methods A 173
– – sudden unexplained death A 173
– – WHO multinational study A 173
– renal dialysis patients – diabetes – Germany 1113
Mouse – New Zealand obese – insulin resistance, hepatic A 69
– NOD (non-obese diabetic) – cyclophosphamide, effect of 391
– – diabetes – protection – calcitriol A 90
– – diazoxide , effect of – diabetes incidence 487
– – GAD antigen A 9
– – immunotherapy A 10
– – islet – interleukin 1β, effect of – sex difference A 94
– – islet ganglioside antibody A 90
– – macrophage cytotoxicity 1252
– – monoclonal antibody, effect of – T-cell receptor Vβ 391
– – T-cell – TH2 type Vβ6$^+$ A 9
– – – islet-derived autoreactive clone, effect of 716
– – – splenic – rat insulinoma-cell protein recognition 385
– – tolbutamide, effect of – diabetes incidence 487
– *ob/ob* – glucose transport – interleukin-1α, effect of A 135
– – islet glucose cycling A 87
– SCID (severe combined immunodeficient)
– – islet-cell autoimmunity transfer by B-lymphocytes 510
– severe combined immunodeficient *[see* Mouse – SCID*]*
– transgenic – amylin, overexpressing 1258
– – GLUT4, overexpressing in fat A 22
Mumps – antibody – Type 1 diabetes 1303
Muscle – skeletal *[see also* GLUT; Insulin – resistance*]*
– – cultured – carbohydrate metabolism A 139
– – glucose processing – IVGTT *vs* hyperinsulinaemic clamp A 143
– – myoblast – satellite cell A 134
– – resting blood flow – insulin resistance and 876
– – sympathetic nerve activity – obesity A 162
– smooth – arterial *[see* Vascular – smooth muscle*]*

N

N-acetylglucosaminidase – urinary – diabetes – Type 2 835
Na^+ *[see* Sodium*]*
Natural killer cell *[see* Lymphocyte – natural killer*]*
Neonate – birth weight – maternal glucose metabolism – normal pregnancy 1315
– islet autoimmunity – maternal diabetes 402, A 58
– proinsulin – maternal Type 1 diabetes 560
Nephropathy, diabetic *[see also* Albuminuria; Aldose; Glomerulus; IGF; Renal; Microalbuminuria*]*
– development – longitudinal study A 217
– albumin excretion rate may be normal A 26
– albuminuria – non-selective shunt A 216
– basement membrane – glucose, effect of A 11
– blood pressure, effect of 1051, A 214
– cardiovascular disease – apo(a) and 438
– care A 62
– collagen synthesis A 11
– diet – chicken & fish A 63
– – protein 829
– epidemiology 1007
– glomerular structure & function 1064
– glycaemic control, effect of 1051
– HbA_{1c}, preceding 961
– heparan sulphate 536
– hypertension, role of 57
– kallikrein, urinary 423
– marker – urinary alkaline phosphatase A 214
– mesangial-cell proliferation 276
– progression 1071
– – antihypertensive medication A 63
– – glycaemic control, effect of A 62
– – risk factors – Pima 1087
– – Type 1 *vs* Type 2 diabetes 1094
– renal haemodynamics – glucose, effect of 622
– – salicylates, effect of 622
Nerve – advanced glycation end-products – diabetes A 198
– biopsy – diabetes – structure & function A 73
– blood flow – imaging 1266
– capillary – streptozotocin-diabetic rat 1132
– – angiotensin II receptor blockade, effect of 1230
– – density 516
– development – GLUT 1 133
– epineurial vessel photography 1266
– function – diabetes – Type 2 68
– – streptozotocin-diabetic rat – essential fatty acids, effect of 1132
– GLUT-1 133
– hyperaemia – capsaicin-induced – streptozotocin-diabetic rat 493

– ischaemia – streptozotocin-diabetic rat 397, A 57
– Na^+/K^+ ATPase – glucose autoxidation A 197
– optic – glucose phosphorylation – hyperglycaemic rabbit A 139
– osmoregulation 608
– polyol pathway – glucose, effect of A 56
– regeneration – diabetes A 198
– taurine depletion – osmotically -induced 608
Neuropathy, diabetic *[see also* Foot*]*
– angiotensin II receptor blockade, effect of – rat 1230
– anti-GAD and 685c
– anti-oxidant treatment – rat 299
– autonomic *[see also* Gastroparesis, Impotence*]*
– – assessment – squatting test A 72
– – cardiovascular A50, A196, A 196
– – exercise, effects of A 153
– – gut motility 948
– – nerve tissue antibodies 564
– – nocturnal blood pressure A 26
– – pancreatic polypeptide response A 195
– – urinary bladder function A 49
– central A 49
– early Type 2 diabetes 68
– epineurial blood flow 1266
– essential fatty acid treatment – rat 397
– incidence A 197
– magnetic resonance imaging A 197
– maladaptive osmoregulation, role of? 608
– medial arterial calcification 615
– microvascular damage, endoneurial 454
– neurogenic inflammation, loss of 493
– nimodipine, effect of A 197
– nitric oxide, role of 516, A 51
– optic – aldose reductase inhibitor, prevention by 893
– oxidative stress, role of? A 197
– painful – nerve function tests A 195
– pancreatic transplantation, improvement after A 187
– prevalence – EURODIAB A 176
– – UK hospital clinics 150
– taurine depletion, role of 608
– vibration threshold – glycaemic control and A 196
Neuropeptide Y – expression – hypothalamus – streptozotocin-diabetic rat 497
– action A 128
– source – noradrenergic stimulation, following A 128
Nicotinamide – biological actions and therapeutic potential 574w
– insulin secretion, effect on 675
– insulin sensitivity, effect on 369c
– islet B-cell lysis, effect on A61, A 62
NIDDY *[see* MODY*]*
Nitric oxide – deficiency – nerve function, effect of A 51
– diabetic neuropathy, role in 516
– donor – SIN-1 9
– endothelial release – fish oil, effect of 33
– insulin-secreting cell toxicity 1252
– islet B-cell toxicity 470c
– islet cell lysis, role in 17
– islet function and 9
– synthase – cytokines, effects of – RINm5F cell A 95
– – glucose, effect of – fibroblast, human A 77
– – islet cell A 5
Nuclear magnetic resonance spectroscopy – erythrocyte ions 146
– magnesium, intracellular 767
Nutrition in infancy – high weight-gain – Type 1 diabetes risk factor A 97

O

Oberdisse, Karl 175
Obesity – amino acid metabolism – diabetes A 146
– BBZ/Wor rat 912
– exercise and – Pima 863
– gastroplasty – insulin sensitivity following A 46
– glucose tolerance – deterioration – cortisol and A 179
– growth hormone treatment A 137
– insulin resistance – childhood A 149
– procollagen peptides in – weight-reduction, effect of A 47
– thermogenesis normal after weight loss A 163
– treatment – biliopancreatic diversion – thermogenesis following A 163
– weight reduction – metabolic effects A 148
Octreotide – therapy – Type 1 diabetes A 138
Offspring – parental streptozotocin diabetes – insulitis 1245
Oryctolagus cuniculus – amylin 183
Osteoporosis – treatment – diabetes A 165
Oxidative stress *[see also* Free radical*]*
– connective tissue stiffening, role in 79
– diabetes 1119r
– – aldose reductase inhibitor, effect of A 204
– – hypertension, role in 265
– diabetic complications, in – anti-oxidants, effect of 1212w
– inhibitor – butylated hydroxytoluene 299
– neuropathy, role in – diabetic rat 299
Oximetry – transcutaneous – diabetic neuropathy A 204

P

Pancreas – perfused – GK rat 3
Pancreastatin – biosynthesis A 102
– insulin secretion, effect on A 115
Pancreatectomy – subtotal – rat – islet B-cell glucose sensitivity, effect on 1238
Pentosidine – formation – tissue specificity – diabetes 936
– urinary – diabetes 664
Peptide YY – action A 128
Pertussis – toxin – G-protein inactivation – islet B-cell studies A 112
Phosphoenolpyruvate carboxykinase – diabetic rat liver 292
Phosphofructokinase 581r
Pima Indians – diabetic retinopathy and glycaemic control 428
– exercise, effects of 863
Placenta – IGF-II – diabetic rat A 166
– LDL cytotoxicity A 41
– oxygen diffusive conductance – diabetes 955
– stereology 955
Plasminogen activator inhibitor – γ-glutamyl transpeptidase and 817
– VLDL and 817
– glucose uptake, inverse correlation with A 125
– Type 2 diabetes A15, A 131
Platelet *[see also* Haemostasis*]*
– activation – glycaemic control, effect of A 201
– – prediabetes Type 1 A 45
– aggregation – diabetes A 201
Plethysmography – strain-gauge 648
Polymerase chain reaction – amylin 183
– glucokinase gene 433, 633
Polyol pathway *[see also* Aldose; Nerve*]*
– glutathione, effect on A 56
– nerve – diabetic rat 299
Prediabetes – Type 1 *[see also* Insulitis*]*
– – GAD antibody – age A 44
– – islet B-cell function A 98
– – islet-cell antibody – subclasses 92c
– – progression – GAD antibody A 45
– – Spain A 44
– – T-cell subsets A 35
– Type 2 – insulin response to glucose A 85
– – markers A 178
– – microalbuminuria 1002
Prediction or risk of diabetes – BB rat – GAD antibody A 10
– Type 1 – autoantibodies A 36
– – HLA-DQ A 88
– – islet-cell antibody – 37kD A 98
– – – 37-40kD – Sardinia A 97
– – siblings of diabetics – age, effect of A 97
– Type 2 – cardiovascular risk factors 553
Pregnancy *[see also* Embryo; Fetus; Neonate; Placenta*]*
– complications – risk factors for diabetes A 168
– diabetes – EASD Study Group *News Section* 24
– – gestational – amylin:insulin ratio A 167
– – – diet A 170
– – – insulin precursors in A 55
– – – intensive treatment – outcome A 64
– – – subsequent glucose tolerance A 65
– – islet B-cell activity in offspring A 166
– – nephropathy A 65
– – Reaven's syndrome 62
– – screening – neonatal outcome A 64
– – Type 2 – outcome A 169
– glucose intolerance – screening A55, A 169
– normal – glucose metabolism A 55
Primate, non-human – diabetes – non-insulin-dependent A 28
Procollagen – obesity A 47
Proinsulin – conversion – constitutive – transfected FAO hepatoma cell 1322
– – insulin secreting cells A 108
– – structural requirements A 108
– like molecules – ethnic variation A 177

– plasma – neonatal – maternal Type 1 diabetes 560
– serum – Type 2 diabetes A120
Prostacyclin – vasa nervorum 516
Protein – kinase – A – glycosaminoglycan N-deacetylase regulation 536
– – C A44
– – Ca^{2+}/calmodulin dependent – islet B-cell A113
– Maillard products 664
Puberty – insulin resistance A58
Pulmonary function – diabetes 580c, 972c
Pyruvate dehydrogenase kinase – assay – ELISA A141

R

Rabbit – amylin and amyloid 183
– cornea – angiogenesis 282
– retina – angiogenesis 282
Rabson-Mendenhall syndrome – insulin receptor mutation 1168
Radical, free – alcohol, following – glucose-6-phosphatase, effect on A152
Rat – BB – diabetes-resistant – lymphopenia locus mapping A91
– – heat shock protein – islet response A90
– – heparan sulphate 310
– – insulitis – immunocyte subsets 1146
– – islet microcirculation 682c
– – natural killer cell 596
– – old normoglycaemic – adoptive transfer of diabetes A90
– – optic neuropathy – aldose reductase inhibitor 893
– BB x Brown Norway – diabetes – segregation study A91
– BB/Wor/Tky – diabetes – insulin-induced remission A91
– BBZ/Wor – diabetes 912
– bone matrix 802
– dwarf – streptozotocin-diabetic – renal hypertrophy A221
– *fa/fa* Zucker – gluconeogenesis A29, A88
– – skeletal muscle GLUT-4 – metformin, effect of 481
– – α_2 adrenoceptor blockade A87
– – glucagon secretion A87
– GK – glucose metabolism 3
– – insulin secretion 3, A28
– – islet – glycerophosphate dehydrogenase deficiency 722
– – – B-cell density A28
– – – function – mitochondrial gene expression A86
– – – – nutrient-stimulated A86
– – – glucose metabolism 305
– GK x Wistar F1 hybrid – islet blood flow increased A86
– Interleukin-1 diabetic – nitric oxide, role of A9
– protein-malnourished/fat-fed – insulin secretion defect A46
– sand (*Psammomys obesus*) – proinsulin synthesis & processing A109
– spontaneously hypertensive – insulin resistance A29
– streptozotocin-diabetic – endothelial function and neuropathy 516
– – glomerular capillary morphology 189
– – heparan sulphate 310
– – islet glucose metabolism 305
– – nerve – essential fatty acids, effect of 397
– – neuropathy – angiotensin II 1230
– – – osmoregulation 608
– – phlorizin, effect of 292
– – protein glycation 797
– – skin blood flow 907
– – vanadyl sulphate, effect of 218
Reaven's syndrome A209, A210
– fetal growth 62
– marker – big baby 117
REG gene *[see* Islet – gene expression*]*
Renal – disease – Type 2 diabetes – symposium 977
– failure, end-stage – Type diabetes – Europe 1099
– – – France & francophone tropics 1109
– – – Germany – mortality 1113
– – – Japan 1105
– function in diabetes – Type 1 – glycaemic control, effect of 734
– – – newly-diagnosed 734
– – Type 2 985r
– glomerulus *[see* Glomerulus*]*
– growth – streptozotocin-diabetic rat 1126
– haemodynamics – diabetic nephropathy – salicylate, effect of 622
– hypertrophy – diabetes – growth-hormone-deficient dwarf rat A221
– tubule – proximal – stereology – streptozotocin-diabetic rat 1126
Retina – endothelial cell – GLUT-3 expression – glucose *vs* galactose 808
– function – contrast sensitivity – diabetes A190
– glucose transport 808
– pericyte – glucose, effect of – NO-mediated cGMP A12
– – GLUT-3 regulation 808
– pigment epithelium – IGF A19
Retinopathy – diabetic – animal models A191
– – apolipoprotein A 88
– – early – N-acetyl-β-glucosaminidase as marker A40
– – – visual evoked responses A190
– – fundus photography A41
– – genetic risk factors 1293
– – glycaemic control – Pima 428
– – growth factors in – rabbit 282
– – HbA_{1c}, preceding 961
– – microvascular cells A11
– – prevalence – Type 2 diabetes – at diagnosis A190
– – progression A40
– – – aminoguanidine, effect of – rat A50
– – – intensive control of Type 1 diabetes A41
– – screening – blindness incidence, effect on A190
– – von Willebrand factor 472c
– galactosaemic – diabetic retinopathy model? 808
– – dog A191
RFLP (restriction fragment length polymorphism)
– tyrosine hydroxylase/insulin/IGF-II region – Type 2 diabetes 25
Risk calculation – control group, importance of 1208
– receiver operating characteristic analysis 423

S

Salicylate – renal haemodynamic effects – diabetic nephropathy 622
Sardinia – Type 1 diabetes 547
Seip-Berardinelli syndrome 172
Sex – apo E phenotype frequency – Type 2 diabetes 229
– hypoglycaemia counterregulation, effect on 460
Sialic acid – glycoprotein – hyperglycaemia, effect of A159
Simvastatin – insulin sensitivity, effect on – Type 2 diabetes 1079
– renal function, effect on – microalbuminuria 1079
Single-photon-emission computed tomography – brain – hypoglycaemia 530
Skin – pentosidine formation – Type 2 diabetes 936
Small baby syndrome 62
Smoking – adrenocortical function, effect on 1275
– diabetes A212, A213
– dyslipidaemia 1275
– insulin resistance 1275
– insulin, plasma, effect on A212
Sodium transport – cell-membrane composition and – Type 1 diabetes 850
– Na^+/glucose – renal – streptozotocin-diabetic rat A220
– Na^+/H^+ – diabetes – Type 1 A217
– – fibroblast – diabetic nephropathy A222
– – insulin, effect of 813
– Na^+/K^+ ATPase – diabetes – tissue differences A199
– Na^+/Li^+ – cardiovascular risk factors and – diabetes A206
– – hypertension – pregnancy A218
– – insulin resistance and 52
Somatostatin – cell – Ca^{2+} flux A103
Sorbitol – dehydrogenase – inhibitor – diabetic complications, effect on A50
SPECT *[see* Single-photon-emission computed tomography*]*
Stereology – glomerulus 189, 523, 1064
– placenta 955
Stiff man syndrome A24
Streptozotocin – diabetes – oral insulin, protection by – Kunming mouse A91
Stress – mental – insulin resistance in A186
Stroke *[see also* Vascular – disease*]*
Stroke – size – diabetes A208
Sulphonylurea – action – muscle insulin sensitivity A139
– glibenclamide – pharmacodynamics A180
– – pharmacokinetics A180
– gliclazide – hepatic action A181
– – muscle glucose uptake, direct stimulation A180

- glyburide – insulin secretion, effect on 791
- insulin secretion, effect on */see also* Insulin – secretion/
- – exocytosis, direct action on A 60
- NOD mouse diabetes incidence, effect on 487
- receptor – islet B-cell A 74
- split proinsulin levels, effect on – Type 2 diabetes A 67
- treatment – insulin, combined with A 76

Suprarenal */see* Adrenal/
Syndrome X, metabolic */see* Reaven's syndrome/

T

T-cell */see* Lymphocyte – T/
TAP (Transporters associated with antigen processing)
- gene – Type 1 diabetes A 17

Thyroid hormone metabolism – diabetes – rat A 149
Thyrotropin-releasing hormone – islet – glucagon secretion, effect on A 119
Tolbutamide */see* Sulphonylurea/
Transplantation – bone marrow – polyendocrine autoimmunity transfer 541
- islet *News Section* 47 w
- – encapsulation A 14, A 188, A 189
- – renal transplant, following – rat A 187
- – revascularisation A 14
- – storage A 189, A 188
- – streptozotocin-diabetic rat A 187
- – tolerance induction – monoclonal antibody A 14
- – Type 1 diabetes A 13
- pancreas *News Section* 47 w
- – C-peptide responses A 186
- – exocrine function – endocrine relevance A 13
- – insulin secretory capacity A 13
- – – glucose potentiation A 186
- – systemic hormone delivery, effects of – dog A 51
- – Type 2 diabetes transfer A 13

Transporter – antigen processing, associated with */see* TAP/
Travel and diabetes – atmospheric pressure and insulin pumps A 161
Triglyceride – insulin resistance and A 132
Tumour necrosis factor */see also* Cytokine/
- islet, effect on – fetal rat A 94

Turner's syndrome – glucose tolerance, impaired – GIP, role of A 48
- growth hormone treatment A 138

Tyrosine – hydroxylase – gene – Type 2 diabetes 25
- kinase */see* Insulin – receptor/

U

UDPG study – glomerular histology at autopsy 1057
UK Prospective Diabetes Study 835, 1021
Urine – albumin – assay – sample storage & preparation 993
- transferrin – diabetes – nocturnal blood pressure A 27

V

Vaccination – mumps-measles-rubella – Type 1 diabetes incidence 1303
Vanadium compounds */see* Hypoglycaemic agent/
Vascular – calcification – medial arterial – diabetic neuropathy 615
- disease */see also* Atherosclerosis/
- – carotid A 208
- – cerebral */see also* Stroke/
- – cytomegalovirus – diabetes A 16
- – peripheral – incidence – Type 2 diabetes A 205
- smooth muscle – adenylate cyclase activation – diabetes A 139
- – endothelin-1 receptor – insulin, effect of A 203
- – G-protein function – diabetes A 112
- – Na^+/K^+ ATPase – insulin, effect of 212

Vasoactive intestinal polypeptide */see* VIP/
Vasomotor function – coronary – diabetes – insulin, effect of A 210
- diabetes – Type 2 A 70
- hyperglycaemia, effect of A 70
- insulin, effect of 212
- – normal human forearm A 124
- microalbuminuria A 70
- nerve blockade, effect of A 70

VIP (vasoactive intestinal polypeptide)
- insulin secretion, effect on – mouse islet 920

Virus – cytomegalo A 16
- entero – maternal – Type 1 diabetes risk A 35
- Type 1 diabetes 687 r

Vision, Visual */see also* Eye; Retina; Retinopathy/
- evoked response – BB rat 893

Vitamin – A – levels in diabetic children A 165
- C */see* Ascorbic acid/
- D3–1,25$(OH)_2$ (calcitriol) */see* Mouse NOD; Insulin – resistance – uraemia/
- E – insulin action and A 131